

# A Bibliography of Publications about the Python Scripting and Programming Language

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24 April 2024  
Version 2.200

## Abstract

This bibliography records books about the Python scripting and programming Language and related software.

[WBS21]. *D* [HH17].  $\Gamma$  [DEMM19].  $\mu$   
[Bie21]. *N* [HH17].  $\nu$  [Bie21]. *Q*  
[JWHS16, MSP<sup>+</sup>22]. *UnBlocks<sup>gen</sup>* [Ras20].

**-amino** [WBS21]. **-d**  
[CC20, Pet02, RKVL14]. **-from-** [Bie21].  
**-LSKUM** [MSP<sup>+</sup>22]. **-method** [DEMM19].  
**-peptide** [WBS21]. **-Statistics** [JWHS16].

## Title word cross-reference

**#105** [Bri12a]. **#106** [Bri12b].

**.** [Lip22]. **.NET**  
[SKS08, HF06, SM04, Stu07].

1 [BRF<sup>+</sup>23, DB17, Hug18, RKVL14, Sch21].  
1.5 [SAA18]. **\$105** [Liu22]. **\$136.46** [Sau23].  
2 [NT24, SLDF<sup>+</sup>21]. **\$24.95** [Lee17]. 3  
[Bra13, CC20, ML16a, NS22, Pet02,  
PBN<sup>+</sup>09, Ras20, SDS00, ZL20]. **\$34.95**  
[Ano00a]. **\$44.95** [Ano97a]. **\$63.96** [Lip22].  
**\$99.95** [Hor22, Lip21].  $^1\Sigma$  [BGHC23].  $\beta$

**/Python** [LWH12, SV14].

**1** [ddSNX22]. **1.0**  
[Bal18, BS19, DCRF23, KPK<sup>+</sup>17].  
**1.1.0-pyfao56** [BTDT23]. **1.x** [Sal18]. **10**  
[SV14]. **1004** [RG20]. **1016** [HFB21]. **1025**

[PLRG22]. **10th** [ACM97]. **11** [Ano18]. **11th** [IEEE97a]. **16** [HHJCRB21]. **1997** [Ano97d].

**2** [DPSD08, FNX22, GNPP23, JNN13, LS17, MP19a]. **2-D** [GNPP23]. **2.0** [Ano00c, MBW07, Seg07, SJL18, Yes15]. **2.0-pyFIRI** [ZRK22]. **2.2** [Chu02b]. **2.6** [Pay11]. **2000** [Ano00c]. **2001** [Ano01a]. **2009** [Jan10]. **2020** [CLT20]. **23** [ESM98]. **251pp.** [Gve09]. **27th** [CLT20]. **2D** [ddSNX22].

**3**  
[Bea09a, Bea12, BJ14a, Fas18, HB16, Kiu13, LD19, Lee17, MP19a, MCGK19, MSV23, MH15, MOM21, Per14b, Phi10, Phi15, Pil09, Sa'23, SW15, SS21, Sum09, Sum10]. **3.0** [MMEH08, Per14b, RSPJ21, Wei09]. **3.1** [Pay11]. **3D** [FNX22, PAB+97, SML06].

**4** [CSZ+19, Cla15]. **4th** [Ass96, USE00].

**5** [Dan18a, Liu22]. **56** [BTDT23, Tho22, TBD23].

**6** [Ano13, Hor22]. **6th** [Ano97c].

**7** [Ano15a]. **77** [GH18, GHN19].

**8** [Lip21]. **839** [Kir04].

**9** [Ano15b]. **910** [Kor11]. **923** [Wim12]. **'96** [HK95, Ass96]. **'97** [ACM97]. **978** [Ano13, Ano15a, Ano15b, Cla15, Hor22, Lee17, Lip21, Liu22, Sa'23]. **978-0-12-418676-7** [Ano14]. **978-0-12-418683-5** [Ano14]. **978-0-367-74845-6** [Hor22]. **978-0-521-72596-5** [Gve09]. **978-0-691-17050-3** [Lee17]. **978-1-032-04174-2** [Lip22]. **978-1-108-49433-5** [Liu22]. **978-1-138-48395-8** [Lip21]. **978-1-4665-0455-4** [Cla15].

**978-1-59327-590-7** [Ano15a]. **978-1-59327-640-9** [Ano15b]. **978-1-59749-957-6** [Ano13]. **978-981-16-8615-3** [Sa'23]. **997** [Spe19].

**ab-initio** [PP23]. **Abaqus** [GTC21, SMD23]. **ABCal** [Le 24]. **absolute** [Daw03, Daw06, Daw10, MTS+18]. **Abstract** [CBW+21]. **Abstraction** [Hen08, LP19]. **Abstractions** [RHM+17]. **accelerate** [LHM14]. **accelerated** [CWLG+21, ECS23, MSP+22, NT24]. **Accelerating** [ZLBF14, YPB16]. **Acceleration** [BKH+22, JS24, Wu13]. **Accelerator** [RSRT19]. **accelerators** [Mar18]. **acceptance** [Sal14]. **access** [BB17]. **Accessing** [Buc14]. **Accord** [Sta19]. **Account** [Luk23]. **Accuracy** [LV20]. **accurate** [LJ23, LN23]. **acid** [WBS21]. **Acquisition** [CWM+21, Myr15]. **activation** [SH19b]. **Active** [BBB02, CHG+16, RKR21, Mit00]. **Active-subspaces** [CHG+16]. **ActiveState** [Ano00c]. **ACTS** [DGMP09]. **Ada** [Bri12a, Bri12b, Mar21, Men09, Mos20b, Och09, RAH+01, Ver22b]. **Adaptive** [CHM24, CV22, SVY09]. **Adding** [IOC+12, Tab10]. **Additivity** [WV22]. **Adjoint** [HA20]. **Administration** [Bru09, GJ08, Sil14]. **adsorbed** [SSH16]. **Advanced** [Chu07a, LT03, Sha24, DDK19, Lan13]. **Advances** [Poo16, Spo12]. **Adventures** [Ric15]. **affine** [RCAE+20]. **After** [DF21a]. **again** [Cas20]. **against** [Pre03]. **age** [LL08]. **Agent** [Evv12, KFV20, NZPWR22, GG21]. **Agent-Based** [KFV20, NZPWR22, GG21]. **agents** [HMD+96, Lot14b]. **Agglomerative** [Mül13]. **aggregate** [VFMM08]. **Agile** [Suc13, VB08, You08]. **Agoren** [Ano01a]. **Agreement** [Evv12]. **Agresti** [Hor22, Sau23]. **agricultural** [ZTC+21]. **AI** [Sav23, ZGL20]. **AIL** [vd91]. **Ajax** [RDS07]. **Ajax-powered** [RDS07]. **aktuell** [EK08].

**aktuelles** [Lin06b]. **Alan** [Hor22, Sau23]. **Albany** [LPH23]. **Alberta** [ACM97]. **Alexander** [Ish17]. **Algebra** [PBB22, BCG05, JCMG11, LKJC21, RV20, Sah15]. **AlgoPy** [WL13]. **Algorithm** [BTR14, HWJ<sup>+</sup>21, Luk23, Wit15, AWO<sup>+</sup>21, HFB21, Kir04, Kor11, PLRG22, RG20, Spe19, Tau16, Wim12]. **Algorithm-Centric** [HWJ<sup>+</sup>21]. **Algorithmic** [WL13]. **Algorithms** [BH12, DD15, GMP<sup>+</sup>20, Het10, Het14, Jan10, KBLJ18, OOM<sup>+</sup>23, CFPS23, Di 13, DV21, KG23, RZ09, SUM21, VBM<sup>+</sup>18, Wep15]. **Alias** [GLS<sup>+</sup>10]. **Alice** [PAB<sup>+</sup>97, UVa95]. **alike** [Thu22]. **all-atom** [HQF<sup>+</sup>20]. **alle** [Lin06b, The09]. **Allen** [Gve09]. **aller** [DF00]. **allow** [BM18]. **alternative** [MSS<sup>+</sup>19]. **always** [Buc15]. **amino** [WBS21]. **Amit** [Ano15b]. **AMLCS** [NRC23]. **AMLCS-DA** [NRC23]. **amplification** [SAD22]. **amplitudes** [HJK<sup>+</sup>24]. **AmPyfier** [SAD22]. **ana\_cont** [KH23]. **analyse** [VM22]. **analyses** [Le 24, MFL<sup>+</sup>22, Spi18]. **Analysing** [ZTC<sup>+</sup>21]. **Analysis** [BHS18, CRL21, CZZ19, CH17, GdGB<sup>+</sup>18, GDP18, HU17, IEE20, ISMA18, KSB12, LV20, LS16, MAFM21, Mar21, McK12, Mil18, MB07, OZW18, PBK22, Sha24, Sta21, TGEA09, TLR21, VPO19, WBR<sup>+</sup>22, XL18, AM19, ACS23, BB13, Bow15, BYL<sup>+</sup>21, CC20, Cue13, DLC23, FPSZ21, Gal22, GFB<sup>+</sup>14, GLS<sup>+</sup>10, GHKW22, GEH19, HS22, HOB23, Hug18, Idr14, Ish17, IOC<sup>+</sup>12, IHT23, ICVG14, JKKN23, KSS20, KS21, KXK<sup>+</sup>23, LRL23, LYZ<sup>+</sup>22, MP19a, MSP<sup>+</sup>22, MPMC21, Mü123, NMGB17, Nel15, OLRLB21, PM23, PFLG21, Ras20, RJAL09, RGP<sup>+</sup>22, RRRGVD19, Sal18, SHFJ18, SLDF<sup>+</sup>21, SL20, Sto13, SH19b, Tom15, VCLS21, WPM<sup>+</sup>20, Wes15, Wet20, WKS22, Yes15, ZWCQ22, LFT21, PARS22, Vel23]. **analysts** [O'C13]. **analytic** [KH23, MD22a, TF23]. **Analytical** [NCS17, MS15, She15b]. **Analytically** [EPF<sup>+</sup>23, Lip22, Piñ24, ÇA23, CFÁA<sup>+</sup>20, DDK19, Mil14, Mil15, Nel15, RO15a, SK19]. **analyze** [Lay15, Lot14b, MB17, OBWM23, Wes15, ZAPS20]. **analyzer** [MTPHH18]. **Analyzing** [GRG21, GPEM23, HFF<sup>+</sup>17, MK16, PMBF17, YHX22]. **Andrew** [Ish17]. **Android** [Bar11]. **Andy** [Ano00a]. **angewendet** [Wei06a]. **angle** [MTPHH18, OLRLB21, RGP<sup>+</sup>22, SL20]. **angle-resolved** [SL20]. **animation** [vdH18]. **anisotropic** [BVV22]. **Annotated** [Di 13, Wep15, Bro00]. **Annotator** [HYG16]. **Annual** [ACM97, Ass96, USE00]. **anomalies** [MTS<sup>+</sup>18]. **anomaly** [BJM23]. **Ansible** [BB22a, DDT20]. **AnsibleMetrics** [DDT20]. **antenna** [SDP<sup>+</sup>20]. **Anthology** [Anoxxb]. **Antlab** [GMS17]. **Any** [Pre03]. **Apache** [TFAL21, TSC02]. **APEX** [Wai21]. **API** [Ano98b, AJH<sup>+</sup>12, BG17, FSZD20, HZ23, Kuc98c, Men09, MBA19, SGPHD<sup>+</sup>17, Smi17, van98c]. **APIs** [BLS<sup>+</sup>23, Meh15]. **App** [Pip15, San15]. **Application** [Ano01b, BSSz<sup>+</sup>20, EML21, Gut16, Orb18, Bah15, BL97a, Buc15, CS21, HQF<sup>+</sup>20, HCPF95, KXK<sup>+</sup>23, OE21, Ree04, Rem01b, SV14, CMS22]. **application-programming** [SV14]. **Applications** [AJH<sup>+</sup>12, Ble20, CBST24, DGMP09, Has16, ML16a, MSR03, Nil07a, PBK22, Pul00, RM19, SRS<sup>+</sup>23, Shi07, AFL23, BL97b, BCG05, CV15, CB96, DAJ<sup>+</sup>15, Di 13, GMP<sup>+</sup>20, Gup15, HF06, Har12, Hig03, Jos15, Kar14, Lot14a, MLB22, Pip15, RDS07, RG10, RCRS06, SW15, ST<sup>+</sup>07, SML06, Seg07, SLA<sup>+</sup>23, Ull15, Wei15, Wep15, Yan14, YHA<sup>+</sup>16, Zac15]. **Applied** [Sha24]. **apply** [Idr14]. **applying** [Sal14]. **Apprendre** [Swi09]. **apprenticeships** [Lon08]. **Approach** [CHM24, EVV12, Joh15, Liu22, Mat16, Mis19, Osa17, SMF<sup>+</sup>23, Arb14, BBHB22, Bro06, FMPS17, HHK<sup>+</sup>09, PP23, SML06, SWD15, Sha03]. **Approaches** [KLM14, KLM15, Bra13, MD15, RMZG06]. **Approximate** [FV18]. **approximation**

[AYI<sup>+</sup>24]. **approxposterior** [FV18]. **apps** [Sal18]. **April** [IEE97a]. **arbitrary** [JT14]. **arbitrary-precision** [JT14]. **ARC** [RSPJ21, Ano00c]. **ArcGIS** [Tom15]. **ArcGIS-geospatial** [Tom15]. **Architecture** [HM18, LLL<sup>+</sup>20]. **Architectures** [SBC<sup>+</sup>17]. **archival** [Ver22a]. **Archive** [Wal97]. **archives** [Bro00]. **ArcPy** [Tom15]. **Arduino** [DAJ<sup>+</sup>15, KSH14]. **Area** [SYGY21]. **ARITH** [CLT20]. **Arithmetic** [CLT20, KJ14, Bri06, JT14]. **Arizona** [Ano97d]. **ARL's** [War18]. **ARM** [HC16]. **ARPIST** [LJ23]. **array** [Fas18]. **Arrays** [HH17, JM20]. **art** [MSV23, Wei15, FLS<sup>+</sup>20, HC16]. **Article** [Wat95]. **Artificial** [Tan06, DSB<sup>+</sup>23, Sa'23]. **ASCII** [IG19]. **Asia** [IEE97b]. **aspiring** [Lot14b]. **assembly** [TBJ18]. **Assessing** [LJ19]. **assessment** [SUM21]. **assets** [TTHZ23]. **Assimilation** [JCL<sup>+</sup>20, NRC23]. **assisted** [WRBT21]. **Associates** [Jan10]. **Assurance** [WL20]. **AST** [HWW<sup>+</sup>15, ZLBF14]. **Astroinformatics** [MAC14]. **astronomical** [HJPB17]. **astronomy** [Ish17, ICVG14]. **astrophysics** [MAC<sup>+</sup>21]. **asymmetric** [CFSK14]. **Asynchronous** [PLRG22]. **Atlanta** [IEE20, USE00]. **Atmospheric** [vdOJP<sup>+</sup>20, NRC23]. **ATNF** [Pit18]. **atom** [HQF<sup>+</sup>20]. **Atomic** [OPA<sup>+</sup>14, Ren23, RSPJ21]. **atomistic** [HHP<sup>+</sup>16, WBK<sup>+</sup>24]. **Attacks** [OOM<sup>+</sup>23]. **Attribute** [TLR21]. **Auction** [Evv12]. **Auction-Based** [Evv12]. **AUGMECON** [FPN<sup>+</sup>22]. **AUGMECON-Py** [FPN<sup>+</sup>22]. **auroral** [ZRK21, ZRK22]. **Ausdrücke** [SKS08]. **Authentication** [SST23]. **author** [Le 24]. **AutoCNet** [LRPD18]. **autoDIAS** [SH19b]. **automan** [Ram18a]. **Automate** [Swe14, Tom15]. **Automated** [ABCC22, Bea98, HAB<sup>+</sup>20, LMW12, LLL<sup>+</sup>20, MCF<sup>+</sup>22, TS14, TLR21, AAYK23, Law15, LKF23, MBA<sup>+</sup>22, SH19b, LW10]. **Automatic** [LV20, MAC14, MO14, RCAE<sup>+</sup>20, RJAL09, AG23, SL21]. **Automatically** [CYKG23]. **Automating** [Ble20, RHM<sup>+</sup>17, JAGP14]. **Automation** [OZW18, Ram18a, Ste06]. **autonomous** [FMPS17, Len15]. **AutoParallel** [RCAE<sup>+</sup>20]. **avancées** [Chu07a]. **awarded** [Bal12]. **aware** [ABF13, VC18]. **Awk** [Bla02, Bla04]. **AWS** [Ano20]. **axisymmetric** [MFQ<sup>+</sup>21]. **Azure** [TCE21]. **B** [Gve09, Lip21]. **b/w** [Lip21]. **backed** [YHA<sup>+</sup>16]. **Bad** [Bea09a]. **badcrossbar** [JM20]. **Banded** [Wim12]. **Banff** [ACM97]. **BANSHEE** [KMLP<sup>+</sup>23]. **Based** [ABCC22, Ang00a, Aya14, BBB02, CHM24, DGMP09, EVV12, FLS<sup>+</sup>20, HKGvS21, HWJ<sup>+</sup>21, KFV20, Nor17, PBK22, Ram18a, RSRT19, SN12, SST23, Sta21, VBI<sup>+</sup>23, ZGL20, AZH<sup>+</sup>24, ABGD<sup>+</sup>20, AZLY18, BBHB22, BKMY03, BKMY04, BWMS22, BB17, CS21, CFMR19, CM20, CJYH23, CB96, CKC23, Dav21, Dec04, FNX22, Gal22, GP22, GCBDDBF23, GPP<sup>+</sup>21, GG21, GYWG23, Gup15, JAGP14, JLP23, KG23, KSH14, KXK<sup>+</sup>23, Lac06, LHH<sup>+</sup>21, LYX<sup>+</sup>18, LYZ<sup>+</sup>22, LDAL20, NL23, NZPWR22, OL17, Ott18, OBWM23, PFH<sup>+</sup>16, PBN<sup>+</sup>09, RS17, Rad06, Rad08, RBP<sup>+</sup>21, SUM21, SLB<sup>+</sup>23, SABEH20, SFC23, SLA<sup>+</sup>23, TEG18, TOPC23, Ver22a, VCLS21, WBS22, WPH<sup>+</sup>22, YKKD19, YMCF23, ZXX23, ddSNX22, dPPD<sup>+</sup>23, FLR22]. **bases** [Swi09]. **BASEveg** [CVV23]. **Bash** [Bla02, Bla04, Ano12]. **Basic** [Het14, Tro96a, Het10]. **basierend** [Lac06]. **basierete** [Ric14]. **basis** [Kir04]. **Bastard** [RAH<sup>+</sup>01]. **Batteries** [Dub07]. **Battery** [GPKL<sup>+</sup>20, HBA<sup>+</sup>20, KBC<sup>+</sup>20, SMT<sup>+</sup>21]. **Battery-free** [KBC<sup>+</sup>20]. **Battery-Testers** [GPKL<sup>+</sup>20]. **Bayes** [Sto13]. **Bayesian** [KMLP<sup>+</sup>23, DF21b, JG17, PHF10, PLRG22, SAB<sup>+</sup>20, Sto13, SBMD14, Laz22]. **bayesint**

[DF21b]. **BDD** [Sal14]. **BeagleBone** [Hia15, Ric13, Ric14, Buc14]. **beam** [THG<sup>+</sup>23]. **Beautiful** [Nai14]. **become** [BM15]. **Bed** [Ngu08a]. **Beedle** [Jan10]. **BEEP** [HBA<sup>+</sup>20]. **beginner** [Daw03, Daw06, Daw10, Swe13, Sha24]. **beginners** [Can14, Cha15, Fla08, She15a, Swe14]. **Beginning** [Het05, Het08, KM15, McG07a, Mue14, Nag17, Pay11, Vai09, Vai14]. **behandelt** [LAG07]. **behavior** [WMM18]. **Behavioral** [Yaa23]. **Behaviors** [GRG21]. **Beispiele** [The09]. **Beispielen** [The09]. **believe** [KI19]. **BEM** [ŠBA<sup>+</sup>15]. **benchmarking** [AES<sup>+</sup>22, JLP23]. **Benchmarks** [DLC23]. **Benefits** [Kra22, CEI<sup>+</sup>12]. **Best** [Hug97, Sco17, LS98, ZKB<sup>+</sup>08]. **best-bet** [LS98]. **bet** [LS98]. **Beta** [DF21b]. **Better** [CCM<sup>+</sup>23, Sit02, ZXX23, SW14, Sla15]. **between** [BLN<sup>+</sup>21, DOS17, EAMSR<sup>+</sup>23, LFT09, MRT<sup>+</sup>22, Sta17]. **beyond** [BMK03, GL08b, GL09, SB15]. **BFree** [KBC<sup>+</sup>20]. **bias** [Le 24]. **bibliographic** [Vel23]. **bibliometric** [Mül23]. **bibliometrics** [RK19]. **bifold** [Kar23, Kar23]. **Big** [AAB22, SBC<sup>+</sup>17, VSS17]. **BigMPI4py** [AAB22]. **BIL** [BM18]. **Bildbearbeitung** [DF00]. **Bilder** [DF00]. **BiLSTM** [PH23]. **Binary** [AVS20]. **Bind** [Cot03]. **binding** [JPJ<sup>+</sup>23, KVSC21]. **Bindings** [LFN<sup>+</sup>11, RJAL09]. **Biocomputing** [HK95]. **Bioinformatics** [AVS20, Ant15, Fla08, Bas08, Bas10, Kin09, SNB<sup>+</sup>19, SB15]. **Biological** [AJH<sup>+</sup>12, VBB18, XL18, ZV19]. **Biological-Modeling** [AJH<sup>+</sup>12]. **biologists** [LHB14]. **Biology** [MGS07, Di 13, LHM14, SB15, Wep15]. **biomolecular** [CBB14, CCFB16]. **bionic** [KI19]. **Bivariate** [Sha24]. **Black** [BLN<sup>+</sup>21, Sei14, Buc14, Ano15a]. **Black-box** [BLN<sup>+</sup>21]. **Blackboard** [UVa95]. **BLAKE** [AMPH14]. **blame** [VSS17]. **BLAS** [FSZD20]. **BLASFEO** [FSZD20]. **Blaxxun** [Ano00c]. **Bleeding** [Wil97a]. **blender** [TTHZ23]. **Blindspots** [BLS<sup>+</sup>23]. **Blitz** [AJJF14]. **Blockchain** [PBK22, SST23]. **Blockchain-Based** [PBK22]. **Blockchain-Enabled** [SST23]. **Blood** [DB17]. **blueprints** [DDT20]. **Boca** [Hor22, Lip21, Lip22, Sau23]. **body** [Gra18]. **Book** [Ano97b, Ano97a, Ano00b, Ano00a, Ano13, Ano14, Ano15a, Ano15b, Bax01, Gve09, Hor22, Hug01, Ish17, Ish19, Jan10, Joh97, Lak17, Laz22, Lee17, Lip21, Lip22, Liu22, LMW12, Mat16, Orb18, Roo98, Sa'23, Sau23, Cha15, GHT06, GHT08]. **Bookshelf** [McG98c, Wil97b, Wil00, Wil01, Wil02]. **Boost** [Moo21, Lan13]. **boring** [Swe14]. **Borland** [Ano00c]. **Bose** [Nil07a]. **Both** [Hug97, Sma12, HB16]. **Bottleneck** [PFLG21]. **Boundary** [CFCB17, CCFB16, ŠBA<sup>+</sup>15, CBB14, KRH18a, KRH18b]. **Boundary-integral** [CFCB17]. **Box** [RAH<sup>+</sup>01, BLN<sup>+</sup>21]. **Boy** [RAH<sup>+</sup>01]. **BPMN** [Fun23]. **BPPy** [Yaa23]. **brain** [KG23]. **breadth** [Sha03]. **breadth-first** [Sha03]. **Bridging** [ACZ<sup>+</sup>22]. **Bringing** [Mos20b]. **broken** [MWM20]. **Browser** [BP17, CB96]. **browser-based** [CB96]. **BSD** [DF00]. **BSP** [Hin03, HLS006]. **Buch** [vF97]. **Buchs** [The09]. **BuckinghamPy** [KS21]. **bug** [HZ23, KCS11, LWH<sup>+</sup>10]. **bugs** [LFYX23, Ros08]. **Build** [RM19, Ada14, Bah15, Jos15, Lot14a, Nai14, Pip15, SML06, Tos09, Yan14, Zac15]. **Builder** [Dav21]. **Building** [BL97b, CR15, Gup15, Kar14, KDC<sup>+</sup>18, Rem01b, Ste06, DPH16, HF06, Hig03, HWW<sup>+</sup>15, RG10, Sal18, Seg07, VBM<sup>+</sup>18, WBS21]. **Buildings** [ZGL20]. **built** [DTM<sup>+</sup>18, Hos12]. **built-in** [DTM<sup>+</sup>18]. **bulk** [SLDF<sup>+</sup>21]. **Business** [Ano01b, Fun23]. **C** [DF00, Jan10, Ano18, Bai08, Bea96, Bea98, BFM18, Bri06, BM18, CSZ<sup>+</sup>19, Cot03, Dal01, EPM09, GH18, GHN19, HZ23,

HAGH18, Kor11, LPH23, LWH12, MSP<sup>+</sup>22, Mar21, MBA19, Nag06, Ngu08c, NZPWR22, OE21, Pre03, Pul00, RZ09, Sah12, SV14, SML06, SGPHD<sup>+</sup>17, SMD23, Smi18, SM04, Stu07, WX18, WMA12, Wil00, Yes15, Zho97, van98c]. **C#** [SKS08]. **C/C** [Bea98, Mar21, Pul00, WMA12]. **CA** [Ano97a, Ano00a, Ass96]. **CAD** [Ano00c, CC20, Ngu08d]. **Cadabra** [CFPS23]. **Cait** [WBR<sup>+</sup>22]. **Calculate** [HKGvS21, MWM20]. **Calculating** [DF21b, BGHC23, Gre16, SP23]. **Calculation** [RG20, TLR21, VBI<sup>+</sup>23, CFSK14, DCRF23, JKST22, Kar23, MR18, QZWU19]. **Calculations** [Kor11, OZW18, AM21, BLN<sup>+</sup>21, CMS22, Cri18, Gra18, JPJ<sup>+</sup>23, KPK<sup>+</sup>17, RSPJ21, VCF22, WZZ<sup>+</sup>23]. **Calculus** [BH12, Sah15]. **calibration** [CWC<sup>+</sup>23]. **California** [ACM92, Ano97c]. **caloric** [SAA18]. **CALPHAD** [OL17]. **CALPHAD-based** [OL17]. **Cambridge** [Gve09, Liu22]. **cameras** [CWC<sup>+</sup>23]. **CameraTransform** [GRW<sup>+</sup>19]. **Can** [Dör08, CBB14]. **Canada** [ACM97, USE96]. **canonical** [PHH<sup>+</sup>12]. **can't** [KI19]. **capabilities** [She97]. **capacity** [Zie19b]. **Capsule** [PH23]. **capture** [SGPHD<sup>+</sup>17]. **Careers** [Ano20, Cas20]. **Carlo** [ABGD<sup>+</sup>20, DMD<sup>+</sup>21, DEMM19, HQF<sup>+</sup>20, JKKN23, KXK<sup>+</sup>23, Mor17, Nil07b, PHH<sup>+</sup>12, WAN<sup>+</sup>22]. **carrier** [TQGE23]. **Case** [JWHS16, Kra22, AJJF14, HPH12, LJ19, LHM14, OMGDG14, RCRS06, SSS22, TFAL21, ÜK12, BB13]. **Case-Control** [JWHS16]. **Cassandra** [DMD<sup>+</sup>21]. **catalogue** [Pit18, Var16]. **Causal** [ZL23, SMM<sup>+</sup>22]. **cavities** [CBB14]. **CD** [DF00, Lin06b, The09]. **CDFTPY** [VCF<sup>+</sup>22]. **cell** [RKVL14]. **cellML** [CM07]. **census** [Smi17]. **Centralities** [PKDM21]. **Centric** [HWJ<sup>+</sup>21]. **CESSIPy** [CR22]. **CFD** [MBLA19, TGEA09]. **CG** [AJH<sup>+</sup>12]. **CGI** [Wei06a, Kuc98b, RG00, Van97b]. **CGI-Scripting** [Wei06a]. **cgimodel** [RG00]. **chain** [HQF<sup>+</sup>20, Mau02, You08]. **Challenges** [Sie17]. **Chameleon** [SVY09]. **Change** [KfV20, Cas17]. **Changes** [RAH<sup>+</sup>01, YHX22]. **Changing** [SYGY21]. **channel** [SGPHD<sup>+</sup>17]. **Chaospy** [FL15]. **Chaotic** [VBI<sup>+</sup>23]. **Chapman** [Ano01a, Lip21, Sau23]. **characteristic** [LYZ<sup>+</sup>22]. **characteristics** [CSRV13]. **charge** [ABS20]. **charged** [SLP<sup>+</sup>22]. **charges** [FH22]. **Charts** [Sjl18, Ada14]. **ChebTools** [Ano18]. **Chebyshev** [Ano18, SST23]. **checking** [Hen08, RF16]. **chemical** [HPT<sup>+</sup>16, NCS17]. **chemically** [Gal22]. **chemistry** [BLN<sup>+</sup>21, Dah18a, KRSD<sup>+</sup>23, PSGL21, VAP<sup>+</sup>21]. **ChemPy** [Dah18a]. **Chet** [Ano14]. **CHICOM** [GHN19]. **Chimera** [HCPF95]. **Chityala** [Myr15]. **CHIWEI** [GH18]. **Chlorophyll** [RKR21]. **Chlorophyll-a** [RKR21]. **choice** [AJJF14]. **Choose** [CLMM20]. **Choosing** [LS97]. **Christian** [Lak17]. **Chromatin** [CSZ<sup>+</sup>19]. **ChromStruct** [CSZ<sup>+</sup>19]. **cij** [LDW<sup>+</sup>21]. **Ciphers** [Swe13]. **Circuit** [MAFM21]. **circular** [CJYH23]. **Circulation** [NRC23]. **city** [SUM21]. **civil** [CR22]. **Class** [Ngu08a, Hig03, LYZ<sup>+</sup>22, RS17, TSD<sup>+</sup>12]. **classes** [How98, TSD<sup>+</sup>12, Ngu08c]. **classical** [NM22, VCF22]. **classifiability** [ZWCQ22]. **Classification** [AVS20, BHF16, PH23, VBI<sup>+</sup>23, CFSK14, Sta17]. **classifier** [CKC23]. **clear** [Ram15]. **Client** [Lac06]. **Climate** [HKGvS21, GWM18, Ros18, WHG17]. **CLIMLAB** [Ros18]. **Clinamen2** [WBK<sup>+</sup>24]. **closed** [Ver22a, XGW23]. **closed-loop** [Ver22a, XGW23]. **Cloud** [Kra22, Suc13, BB22a, Kla11, NEGZG18]. **Cloud-Native** [Kra22]. **Cluster** [BUS21, BLE21]. **Clustering** [JWHS16, Müll13, TOPC23]. **CMInject** [WAK22]. **CMIstark** [CFSK14]. **CMU** [Mac91, Mac92a, Mac92b]. **Cnerator**

[OE21]. **CNNs** [SH19a]. **co** [Wu13]. **co-designed** [Wu13]. **coastal** [MAS<sup>+</sup>22]. **CoastalImageLib** [MAS<sup>+</sup>22]. **coaxial** [YMC23]. **Cobol** [Ano01b]. **coco** [Sta17]. **Code** [Ano00c, Ano01b, BLS<sup>+</sup>23, CSZ<sup>+</sup>19, Fun23, GHN19, Har15, HAB<sup>+</sup>20, Mit00, The09, VMFG17, XMW10, ABGD<sup>+</sup>20, AM10, ABCV21, Ber13, BC09, Buc15, CZA<sup>+</sup>23, Cas17, CBLI22, Day07b, DBdFdSR21, ESM24, GH18, JKST22, Kar23, Lot15b, LDW<sup>+</sup>21, MCF<sup>+</sup>22, MPMC21, MO14, OE21, PP23, RBV16, Ros08, SML06, SP23, SMM<sup>+</sup>22, SZNW23, SGZ23, WMM18, WZ18, YHX22, DDT20]. **Code-Beispiele** [The09]. **Codes** [Anoxxd, Hig22]. **codice** [Day07a]. **Coding** [MAFM21, Cha15, DV21, ZKB<sup>+</sup>08]. **Codon** [SRS<sup>+</sup>23]. **coefficient** [LN23]. **coeur** [Chu07b, Chu07a]. **COFFEE** [DFSW19]. **Cognitive** [KXK<sup>+</sup>23]. **coherent** [MR22]. **coils** [MFQ<sup>+</sup>21]. **cold** [MTPHH18]. **cold-neutron** [MTPHH18]. **Collaboration** [Ano01b]. **Collaborative** [SYGY21, VSS17]. **Collation** [Tau16]. **Collected** [Ngu08a]. **collecting** [Mit15, PMBF17]. **Collection** [GMN21, Ngu08d, Ngu08e]. **collections** [BDT13, DTM<sup>+</sup>18, SVY09]. **collective** [Seg07]. **Collector** [Roo97]. **color** [Lip22]. **Combinatorial** [ZTT22]. **combined** [AM10]. **Combining** [Zie19a, MS15]. **Comfort** [ZGL20, BDQ<sup>+</sup>22, TS20]. **Command** [CC20, IG19, CWM<sup>+</sup>21]. **commandi** [Day07a]. **commands** [Day07b]. **Comments** [Roo97, VMFG17]. **commercial** [Tab10]. **Common** [Mac91, Mac92a, Mac92b, MBA19, RO15b, RAH<sup>+</sup>01, MAS<sup>+</sup>22]. **Communication** [SST23]. **Communications** [Ano00c]. **Communities** [GPEM23]. **community** [Gar09]. **Comparative** [VPO19, Kak08, Mau02, ZXX24]. **comparing** [GHN19, MD15]. **Comparison** [Pre00, Zho97]. **Competitive** [DV21]. **compilable** [LKJC<sup>+</sup>21]. **Compilation** [NM22, MD15, WMA12]. **Compiler** [Ano01b, SRS<sup>+</sup>23, CEI<sup>+</sup>12, HS12, IOC<sup>+</sup>12, Mac92b, Ott18, TTS<sup>+</sup>10]. **compilers** [ZXX24]. **Compiling** [CG23, Fee16, CGK11]. **complete** [BS19, DMD<sup>+</sup>21, Meh15, Sum09, Sum10]. **completely** [Ori97]. **completion** [SZW<sup>+</sup>22]. **complex** [LR14, She15b, WM21, YMC23]. **Complexity** [DD15, ABCV21, KCS11]. **Compliant** [Ano01b]. **components** [HCPF95]. **Composable** [MLGW18]. **Composing** [RHM<sup>+</sup>17]. **composition** [BWMS22]. **composition-structure** [BWMS22]. **COMPOSTI** [NL23]. **compound** [AAYK23]. **compounds** [DMC<sup>+</sup>15]. **comprehend** [Cox14]. **Comprehensive** [RO15b, RG10, Tel06, You08]. **compressible** [GP22, Par22]. **Compressive** [OPA<sup>+</sup>14]. **Computation** [AMGM20, BKH<sup>+</sup>22, Coe17, Gut13, Gut16, HA20, Laz22, LLL<sup>+</sup>20, Orb18, SL21, Wim12, CM20, Gir21, Guz03, Le 24, OC20, SHTE23]. **Computational** [Ano21, Aya14, Băc07, Bar21, Ble20, HM18, LT03, Lan08, MS07, OL17, VMFG17, Vir16, Bor07, HHK<sup>+</sup>09, Lan06, Lan07, MDRN18, PSG121, PGM19, RGS<sup>+</sup>21, SMM<sup>+</sup>22, TBA<sup>+</sup>17, VAP<sup>+</sup>21, Gal22]. **Computations** [KJ14, AM10, CLM05, RHLTG<sup>+</sup>22, YFD98]. **compute** [EAMSR<sup>+</sup>23]. **Computer** [BCE<sup>+</sup>22, CLT20, Dow15, IEE97b, MR07, Osa17, Can14, Dow09, Jos15, JČMG11, MTS<sup>+</sup>18, MH15, Rad06, RMZG06, San13, Swe13]. **Computers** [BT06, JLP23]. **Computing** [AJYH18, BKRT21, BSSz<sup>+</sup>20, DD15, HTA<sup>+</sup>97, HM18, IEE20, LHB14, LD07, NM22, Oli07, PG07, PGH11, Ram18a, TT21, VB08, BCRS15, BS19, BL97b, CSRV13, Cla15, Dan18a, DMC<sup>+</sup>15, DDMS14, DCOC<sup>+</sup>19, EBNS22, FKA<sup>+</sup>17, HHVB21, Her14, JM20, Kir04, LW10, Lub14, LS17, Mar18, Meh15, MSP<sup>+</sup>17, MBK09, Nil07a, Ras18, Ros13, RFG13, Ros14,

SLB<sup>+</sup>23, SAA18, SFC23, YPB16].  
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**converter** [SMD23, Sta17]. **converting**  
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 [USE96]. **Copatrec** [KF23]. **Copperhead**  
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 [MSR03]. **Core**  
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**corpus** [Joh08]. **Correction** [Ano02].  
**Corrections** [Spe19, GRW<sup>+</sup>19].  
**correctness** [Hen08]. **correlated** [SP23].  
**Correlation** [FNX22, KF23, MR18, RCT23,  
 CWLG<sup>+</sup>21, ddSNX22]. **correspondence**  
 [LRPD18, RS17]. **cosmology** [CFPS23].  
**cottoncandy** [NEGZG18]. **count** [VM22].  
**Counterexample** [LP19]. **counting**  
 [GdGB<sup>+</sup>18]. **country** [Sta17]. **Coupled**  
 [HM18, CVV23, Roa23]. **Coupling** [HM18].  
**Course** [WX18, Fla08, GL07a, Guz03,  
 MS15, Mau02, MSW08]. **courses** [RMZG06].  
**Cover** [KFV20]. **cp** [Zie19b]. **cp-tools**  
 [Zie19b]. **CppyABM** [NZPWR22].  
**Cracking** [GAS<sup>+</sup>16]. **crafting**  
 [Vai09, Vai14]. **CRAPPY** [CWM<sup>+</sup>21].  
**CRC** [Cla15, Hor22, Lip21, Lip22, Sau23].  
**Create** [Ano01a, Cha01, Kno08, Lay15,  
 LPG<sup>+</sup>23, RDS07, Ull15].  
**create-modify-reuse** [Kno08]. **Creating**  
 [Fun23, MD17, CR15, KL97, MAS<sup>+</sup>22,  
 Mur18]. **creation** [Mül23, WAN<sup>+</sup>22].  
**creativity** [Gal14]. **Creator** [Chu02b].  
**Credible** [DF21b]. **Crispyn**  
 [BW22, BWS23]. **criteria**  
 [BW22, BWS23, SKS23]. **cross**  
 [CFW17, HPT<sup>+</sup>16, Ull15]. **cross-machine**  
 [CFW17]. **cross-platform** [HPT<sup>+</sup>16, Ull15].  
**crossbar** [JM20]. **Crossing** [Gue18].  
**crunching** [Wil05]. **Cryogenic** [WBR<sup>+</sup>22].  
**cryptography** [Swe13]. **crystal**  
 [FPSZ21, CZA<sup>+</sup>23]. **crystalline** [Zie19b].  
**crystallography** [TV13].  
**CRYSTALpytools** [CZA<sup>+</sup>23]. **CS** [Sha03].  
**CS1** [EPM09, GL07a, GL08c, Rad08]. **CS2**  
 [EPM09]. **Cube** [ÇA23]. **CUDA** [JS24].  
**Current** [PBB22]. **currents** [JM20].  
**curriculum** [HRS06]. **customizable**  
 [Bah15]. **Customized** [TGEA09]. **Cutting**  
 [TTHZ23, RO15a]. **cutting-edge** [RO15a].  
**CV** [Len15]. **Cyber** [Ano21, OOM<sup>+</sup>23].  
**Cyber-Attacks** [OOM<sup>+</sup>23].  
**Cyber-Physical** [Ano21]. **CycFlowDec**  
 [BS21]. **cycles** [BS21, Hug18]. **Cython**  
 [Smi15].  
**d** [CC20, Bra13, BRF<sup>+</sup>23, DB17, GNPP23,  
 Hug18, ML16a, NS22, NT24, Pet02,



PBN<sup>+</sup>09, RKVL14, Ras20, SDS00, Sch21, SAA18, SLDF<sup>+</sup>21, ZL20]. **D3GB** [BP17]. **DAEs** [SL21]. **DAG** [IG19]. **dark** [May21]. **DarkNews** [AZH<sup>+</sup>24]. **Data** [Ano97d, AAB22, AMB19, Bad20, CBST24, CSZ<sup>+</sup>19, CZZ19, EPF<sup>+</sup>23, FLS<sup>+</sup>20, GPKL<sup>+</sup>20, GDP18, GRKN<sup>+</sup>19, Gut16, HW19, HC16, HHJCRB21, Hor22, HMB23, JCL<sup>+</sup>20, KJ15, KHD<sup>+</sup>16, MAFM21, McK12, MT18, MT19, ML16a, Mil18, Ngu08a, PL20, RZ09, RKR21, Sau23, SBC<sup>+</sup>17, Sha24, TAD23, Van16, WL20, Wil05, ZGV<sup>+</sup>23, Ada14, ASAA20, BB13, BST<sup>+</sup>17, BE20, BB17, BM15, BYL<sup>+</sup>21, BRF<sup>+</sup>23, CGK11, CFÁA<sup>+</sup>20, CR15, Cue13, DB22, DRFB<sup>+</sup>23, DDK19, FKA<sup>+</sup>17, FRdN21, GdGB<sup>+</sup>18, GZT<sup>+</sup>18, GEH19, Hac23a, HHB<sup>+</sup>22, HPT<sup>+</sup>16, HFF<sup>+</sup>17, Idr14, Ish17, ICVG14, JAGP14, Jos16, JKKN23, LRPD18, Lay15, Lob19, Lot14b, Mad15, MB17, MFL<sup>+</sup>22, MTPHH18, MMG19, Mil14, Mil15, Mit15, NMGB17, Nel15, NRC23, NO23, OLRLB21, PFLG21, Ras18, Ren23, RGP<sup>+</sup>22, Ros13, Ros14, RC18, Sal18, SML06]. **data** [She15b, Smi17, SH19a, SLA<sup>+</sup>23, Tom15, Var16, VM22, Ver22a, VCLS21, Wes15, Wet20, ASAA20, Orb18, Ish17, Jan10, Liu22]. **data-driven** [BE20]. **data-intensive** [FKA<sup>+</sup>17]. **Database** [Ano00c, DDK19, SCAK<sup>+</sup>19, SMD23, YHA<sup>+</sup>16]. **database-backed** [YHA<sup>+</sup>16]. **Databases** [GRG21]. **dataset** [RS17]. **Datasets** [HH17, HJPB17, Vel23]. **Dateien** [DF00]. **Datenbanken** [The09, Wei06b]. **David** [Jan10]. **day** [Cha15, GL08b, GL09]. **DB** [Ano98b, Kuc98c]. **DB-API** [Ano98b, Kuc98c]. **dc** [CFSK14]. **dcor** [RCT23]. **Debian** [DF00]. **debt** [TFAL21]. **Debugging** [Par11, BL97a]. **December** [IEE97b]. **Decision** [HGHR20, RBV16, SSS22, SKS23, WKS22, WKS23]. **decision-making** [SSS22, SKS23, WKS23]. **declarative** [FMPS17]. **Decoding** [Hig22]. **decomposing** [BS21]. **decomposition** [TEG18, DTR18]. **Deep** [JCY<sup>+</sup>19, LV20, RM19, BCM21, CJGA23, dPPD<sup>+</sup>23, FLR22]. **deeper** [RO15a]. **defect** [DMC<sup>+</sup>15, TQGE23]. **Defects** [KCV22, AM21, BMZ<sup>+</sup>18, TR22]. **Deferred** [Spe19]. **defined** [Dah18b]. **defining** [RS17]. **Definitive** [HKM08, Gar09, Lot15b, Sum08]. **Demethylation** [AAB22]. **demonstration** [SCAK<sup>+</sup>19]. **demos** [Jos15]. **Dense** [Wim12]. **density** [Kar23, MWK<sup>+</sup>20, VCF22]. **density-in** [Kar23]. **density-in/dependent** [Kar23]. **Dependency** [CCM<sup>+</sup>23]. **Dependent** [KSB12, Hor23, Kar23]. **Derivative** [CFMR19]. **Derivative-free** [CFMR19]. **Derivatives** [AMGM20, HM18]. **derived** [ZAPS20]. **description** [Dec04]. **Design** [Ano01b, BBB02, Bro06, KL97, KB07, MMT09, MH18, Plo97, VEV<sup>+</sup>19, VKSB15, VCR17, AGMFGE23, BSS16, BCC<sup>+</sup>18, Dow09, Kas15, KXK<sup>+</sup>23, Len15, LHM14, MRG18, OA17, Wei15, Gve09]. **designed** [Wu13]. **Designing** [KWBB22, Mit00, CG17, FL15, ZKB<sup>+</sup>08]. **desktop** [Bah15, Law15]. **desukutoppu** [SM04]. **detailed** [Sar14]. **Detecting** [GAS<sup>+</sup>16]. **Detection** [OOM<sup>+</sup>23, PH23, SJK<sup>+</sup>21, TLR21, AAYK23, BJM23, ÇA23, CJYH23, ESM24, JKST22, RMM23, SAB<sup>+</sup>20]. **Detectors** [WBR<sup>+</sup>22, ABGD<sup>+</sup>20, LWH<sup>+</sup>10]. **determination** [LN23, SL21]. **determine** [SGZ23]. **determining** [BW22, BWS23]. **detrended** [GHKW22]. **Develop** [CBST24, BSS16, DAJ<sup>+</sup>15, DV21, Gup15, Jos15, Pal14, SW14, Sar14, She15b]. **Developed** [MOM21]. **Developer** [Hug01, RAH<sup>+</sup>01, dos01, Ano19]. **developers** [Tos09]. **developing** [CJGA23, Har12, RCRS06, RH15]. **Development** [Ano00c, Ano01b, DF21a, GdGB<sup>+</sup>18, Hin03, HKM08, KM15, LD07, Bah15, BL97a,

CFÁA<sup>+</sup>20, Con95, FBC09, Gar09, Gov15, Mau02, McG07a, OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, Per14a, Pip15, Ree04, SUM21, You08, Lac06]. **Devices** [ABCC22, Por03, KPK<sup>+</sup>17]. **Devito** [LLL<sup>+</sup>20]. **DEVSimPy** [CS21]. **DEVSimPy-mob** [CS21]. **DFT** [VMRFC23]. **DGB** [Par11]. **Diagnosis** [SJK<sup>+</sup>21, SL21]. **dialect** [Men09]. **Diatomic** [BGHC23]. **Diatomic-py** [BGHC23]. **DIETERpy** [GMKRS21]. **Different** [Bra13, KLM14, KLM15, Mar21, MD22b, Ori97, PBN<sup>+</sup>09, Sta17, Wep15]. **Differential** [BT06, GWW09, LT03, LMW12, MSL<sup>+</sup>07, DFSW19]. **differentiation** [FSMCFP23, SL21, WL13]. **Diffpack** [LT03, LM03]. **Diffusion** [CZZ19, LN23]. **Diffusive** [BFM18]. **Digital** [Rad08, Hos14, LL08, Rad06, CWLG<sup>+</sup>21, FNX22, MBA<sup>+</sup>22, ddSNX22]. **Dimensional** [Pat16, KS21, NL23, ZAPS20]. **dimensionality** [MSV23]. **Direct** [JCL<sup>+</sup>20, BE20, JKST22, ML16b]. **direpack** [MSV23]. **Discloses** [AAB22]. **discontinuous** [CBLI22]. **discover** [BS19]. **discrete** [CS21, DPH16, JEC18, vdH18]. **discrete-event** [CS21]. **Discretization** [BH12]. **Disease** [JWHS16]. **Diseases** [SJK<sup>+</sup>21]. **Dispatch** [GMKRS21]. **dispel4py** [FKA<sup>+</sup>17]. **display** [Wes15]. **Distance** [BSSz<sup>+</sup>20, RCT23]. **distortion** [SH19b]. **distortion/interaction** [SH19b]. **Distributed** [Ano98c, ABC97, Eur91, SZW<sup>+</sup>22, BCM21, GNPP23, KI19, RCAE<sup>+</sup>20, RFG13, SSH08, SCAK<sup>+</sup>19]. **Distributed-memory** [SZW<sup>+</sup>22, SSH08]. **distributing** [ZKB<sup>+</sup>08]. **Distribution** [Ano00c]. **Distributions** [DF21b, FV18]. **districts** [SUM21]. **dit** [JEC18]. **Dive** [Orr05, Pil04, Pil09]. **Django** [EK08, Alc09, Ben08, FBC09, Gup15, HKM08, MBW07]. **DJMol** [PSGL21]. **DMN** [Fun23]. **DNA** [AAB22, HM22]. **DNest4** [BFM18]. **DNN** [FLR22]. **DNN-Tuner** [FLR22]. **Docker** [ZMD21]. **Document** [Ano00c]. **documents** [KL97]. **Does** [She97]. **Doing** [Sah15, Ano15b]. **DOLFIN** [LW10, LWH12]. **domain** [HWW<sup>+</sup>15]. **domain-specific** [HWW<sup>+</sup>15]. **Done** [HKM08, LRvE17]. **données** [Swi09]. **Doping** [Ano21]. **dot** [KPK<sup>+</sup>17]. **double** [Kar23]. **double-folded** [Kar23]. **Downey** [Gve09]. **download** [HM22]. **Downscaling** [LVH<sup>+</sup>18]. **dozen** [Ros08]. **draw** [RC18]. **Dreaming** [Ros08]. **driven** [BE20, Gov15, Kin05, LKK23, LGS10, Per14a]. **DropPy** [OLRLB21]. **DSLs** [SRS<sup>+</sup>23]. **DSN** [Ver22a]. **DssPyLib** [GNPP23]. **dtwParallel** [EAMSR<sup>+</sup>23]. **dummies** [MM06, Mue14]. **duo** [Els23]. **dust** [Gre18]. **dustmaps** [Gre18]. **Dutch** [vdOJP<sup>+</sup>20]. **Dyer** [Ano00b]. **Dynamic** [DTR18, Ada14, AES<sup>+</sup>22, BC09, BII<sup>+</sup>20, CEI<sup>+</sup>12, DTM<sup>+</sup>18, EAMSR<sup>+</sup>23, FhDAF09, GLS<sup>+</sup>10, LWH<sup>+</sup>10, MRG18, OMGDG14, RF16, SAA18, Wu13, YHA<sup>+</sup>16, YPB16]. **dynamical** [Mar17, Wie18]. **Dynamically** [Kla99, BDT13, IOC<sup>+</sup>12]. **dynamically-typed** [IOC<sup>+</sup>12]. **Dynamics** [AMB19, CVV23, CMM14, GP22, IHT23, JNN12, JNN13, KMK<sup>+</sup>21, LHH<sup>+</sup>21, LN23, PW17, SV14, Sch21, SSD<sup>+</sup>22, THG<sup>+</sup>23]. **dynamism** [BCC<sup>+</sup>18]. **e-book** [Ano14]. **E-Business** [Ano01b]. **eadf** [SDP<sup>+</sup>20]. **Early** [HBA<sup>+</sup>20, Sev15a]. **Earth** [GKK<sup>+</sup>23, ZRK21, ZRK22]. **easily** [SW15]. **EAST** [BYWW23]. **Eastman** [RE22]. **Easy** [CX23, RG00, SJL18, Arb14, Bea96, Cox14, Kla99, NEGZG18, PAB<sup>+</sup>97, Tos09]. **easy-to-comprehend** [Cox14]. **EASYMORE** [GKK<sup>+</sup>23]. **eBook** [Haj08]. **EC** [SHTE23]. **EC-KitY** [SHTE23]. **EcoDynElec** [LPG<sup>+</sup>23]. **Econometrics** [CS09]. **Economics** [CLMM20]. **Ecosystem** [Bar21, PGH11, PM23, TFAL21]. **Eddy** [vdOJP<sup>+</sup>20]. **Eddylicious** [ML18]. **Edge** [Wil97a, RO15a, SFC23]. **EdgeSimPy** [SFC23]. **Edit** [BSSz<sup>+</sup>20]. **Editing** [Ano00c].

**Edition** [Ano00b, Orb18]. **Editor** [RAH<sup>+</sup>01, CB96, Dub07, Gar98]. **Education** [Bäc07, MS07, VMFG17, AG23, DDMS14]. **educational** [GP22, MDR<sup>+</sup>22]. **EEG** [CGHGRB21, VBI<sup>+</sup>23]. **eeglib** [CGHGRB21]. **effect** [CFSK14]. **Effective** [Sla15, Cri18, Ram15, Wha18]. **effects** [SAA18]. **efficiency** [AM10]. **Efficient** [CSRV13, CFÄA<sup>+</sup>20, DD15, GHKW22, KRH18a, KRH18b, RG20, SN12, TEG18, Wim12, BM15, DBdFdsR21, JPJ<sup>+</sup>23, LYZ<sup>+</sup>22, McF16, Pal14, SW14, Sie17, SK19, Zac15, WSK22]. **Efficiently** [PL20, EAMSR<sup>+</sup>23, Lot14a]. **effmass** [Wha18]. **effort** [DLC23]. **EFIT** [BYWW23]. **egtpplot** [MWS18]. **Eighth** [HTA<sup>+</sup>97]. **Einführung** [EK08, LAG07]. **Einsteiger** [Ric14]. **Einstein** [Nil07a]. **Einstieg** [The09]. **einsum** [SG18]. **einsum-like** [SG18]. **elastic** [SLDF<sup>+</sup>21]. **electric** [CFSK14]. **electrical** [XGW23, LYX<sup>+</sup>18]. **electricity** [LPG<sup>+</sup>23]. **electro** [Wie18]. **electro-dynamical** [Wie18]. **electrochemical** [VCLS21]. **electrodynamics** [FH22]. **Electromagnetic** [LFN<sup>+</sup>11, BVV22]. **Electron** [ABGD<sup>+</sup>20, GDP18, SP23]. **Electronic** [BLN<sup>+</sup>21, GRG21, HTH<sup>+</sup>20, JPJ<sup>+</sup>23]. **electrostatic** [ABS20]. **electrostatics** [CFCB17, CBB14, CCFB16, KRH18a, KRH18b]. **Elektronik** [Ric14]. **Elektronik-Projekte** [Ric14]. **Element** [LMW12, RHM<sup>+</sup>17, TT21, AM10, KRH18a, KRH18b, Kir04, LW10, LWH12, ZMS18]. **Elementary** [MS15]. **Elements** [Ano02, Ple02, CBB14, CCFB16, GTC21]. **ellipsometry** [RGP<sup>+</sup>22]. **embedded** [Cas17, CGK11, LHM14, Par11]. **Embedding** [MOM21, Nag06, Pul00, van98b, GF18, Rie09, van95a]. **Embo** [PFLG21]. **emgr** [Him23]. **Emipy** [OBWM23]. **emissions** [OBWM23]. **emphasizing** [Gar09]. **Empirical** [ACS23, CASA22, KCVM22, Pre00, SS13, HZ23, KVSC21, LKF23, MP19a, PFLG21, Him23]. **employer** [Ano20]. **employing** [VMRFC23]. **ENA** [BG17]. **Enabled** [SST23]. **Enabling** [GDP18, KBC<sup>+</sup>20, PHH<sup>+</sup>12]. **ENASearch** [BG17]. **encoding** [SGPHD<sup>+</sup>17]. **encrypt** [Lot14b]. **End** [LD07, GHT06]. **ended** [YMCF23]. **Endogenous** [GMKRS21]. **Endoscopy** [PH23]. **ends** [MP19b]. **energetics** [TQGE23]. **Energy** [BB13, LFT21, GDP18, HHM18, MWM20, MTPHH18, QZWU19, RCT23, SUM21, WZZ<sup>+</sup>23, WM21, GPEM23]. **Engine** [Ano00c, Ang99, SCAK<sup>+</sup>19, Pip15, San15]. **Engineering** [IEE97b, STS<sup>+</sup>18, VMFG17, CR22, Kiu10, Kiu13, MP19b, SML06, Yan14]. **Engineers** [MA11, Nag17, O'C13, Sei09]. **engines** [BKC14]. **English** [VPO19, ZV19]. **enhanced** [BBC<sup>+</sup>24, WO14]. **enhancement** [SSS22]. **Ensemble** [AVS20]. **ensure** [Buc15]. **ensuring** [RS17]. **entangled** [ECS23]. **enter** [BCRS15]. **Enterprise** [Hig03]. **Entity** [KDC<sup>+</sup>18, ESM24]. **Entropy** [LD19, VBI<sup>+</sup>23, SR19]. **Entropy-Based** [VBI<sup>+</sup>23]. **Entwicklung** [Lac06]. **Enumeration** [SN12]. **ENVI** [BM18]. **ENVI-BIL** [BM18]. **Environment** [Ano01b, Bar21, BKMY03, BMK03, BKMY04, OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, Pal14, VFMM08, WKS23]. **environmental** [LPG<sup>+</sup>23]. **Environments** [CHM24, McG98c]. **EpyNN** [MDR<sup>+</sup>22]. **eqtools** [CFW17]. **equation** [Bra13, GNPP23, KSS20, MD21]. **Equations** [BT06, GWW09, LT03, LMW12, Luk23, MSL<sup>+</sup>07, TT21, CKK<sup>+</sup>13, Dah18b, DFSW19, WZ18]. **equilibria** [CM20, CFW17]. **Equilibrium** [San13, BYWW23, DMC<sup>+</sup>15]. **Equivalent** [MH18]. **Era** [Sev15b, BB13]. **ergodicity** [MWM20]. **Errata** [Ano01a]. **error** [JKKN23]. **Errors** [Luk23]. **ErsatzPasswords** [GAS<sup>+</sup>16]. **ESB** [Suc13].

**Essential** [Cop08, Joh08, Bea00, Bea01, Bea06, Bea09b, Bow15, Day07b, Lot14b].  
**Essentials** [PR02, Bah15, BM15, CV15, FL06, Lot15b, Moh15, Wes15]. **Estimate** [CSZ<sup>+</sup>19]. **estimating** [WV22, YMCF23].  
**Estimation** [Nor17, FRdN21, LWV20, ZTC<sup>+</sup>21]. **esy** [PL20]. **esy-osmfilter** [PL20].  
**èÜbungsaufgaben** [The09]. **EUR** [Sa'23].  
**Europe** [OBWM23]. **EurOpen** [Eur91].  
**Evaluating** [Dör08, GVLD<sup>+</sup>23, TAD23, AES<sup>+</sup>22, WPH<sup>+</sup>22]. **Evaluation** [ABCV21, GMKRS21, HBA<sup>+</sup>20, KLM14, KLM15, RO15b, TTS<sup>+</sup>10, BHJ<sup>+</sup>18, CSRV13, IOC<sup>+</sup>12, MD15, TR22, VKSB15, ZXX24].  
**evaluator** [Huc18]. **evapotranspiration** [BTDT23, Tho22, TBD23]. **even** [LR14].  
**événements** [Swi09]. **Event** [Kin05, TLR21, AZH<sup>+</sup>24, CS21, DPH16, HQF<sup>+</sup>20, vdH18]. **event-chain** [HQF<sup>+</sup>20].  
**Event-driven** [Kin05]. **events** [LRvE17, WRBT21]. **everyday** [Wil05].  
**evidence** [LFT09]. **Evolution** [TFAL21, DFSW19, HZ23, Yes15].  
**Evolutionary** [MWS18, WBK<sup>+</sup>24, Wie18, SHTE23].  
**evolving** [BJM23]. **exact** [Bri06, TF23].  
**ExactPack** [TF23]. **Examining** [Ang99, CK00]. **example** [Jos15, RH15].  
**Examples** [Lip22, Piñ24]. **exascale** [GVLD<sup>+</sup>23]. **excited** [LHH<sup>+</sup>21]. **exciting** [BCRS15, Gup15]. **Execution** [Fun23, JCY<sup>+</sup>19, AFL23, BB22a, BKC14, DM20, RCAE<sup>+</sup>20, Spi18]. **exemple** [MRA06]. **Exercise** [KWBB22]. **exercises** [TTHZ23]. **existing** [Lot15b]. **ExoData** [Var16]. **exoplanet** [Var16]. **expanded** [RSPJ21]. **Expanding** [LTT<sup>+</sup>24].  
**Expansion** [HJJ<sup>+</sup>22]. **expansions** [Ano18].  
**Experience** [CM07, Pop10]. **Experiences** [SBC<sup>+</sup>17, ZGV<sup>+</sup>23]. **Experiment** [WX18, BST<sup>+</sup>17]. **experimental** [CWM<sup>+</sup>21, KSH14]. **Experiments** [AMB19, MD17, MAFM21, CG17, dPPD<sup>+</sup>23].  
**Expert** [Sma12, ZKB<sup>+</sup>08]. **Explain** [VMFG17]. **explainable** [DSB<sup>+</sup>23, PDS<sup>+</sup>22]. **explaining** [LFT09].  
**Explicit** [HPH12]. **Explorative** [HLR15].  
**Exploratory** [HGHR20]. **explore** [Dan18a, Jos16, Mad15, Sah15].  
**Explorer.py** [WM21]. **exploring** [BMK03, Sev13]. **Exporting** [Ver22b].  
**Exposure** [JWHS16]. **express** [Har07].  
**expression** [CKC23, Stu03, Stu07].  
**expressions** [LR14, Rom14, SG18, SM04, Stu07].  
**extendable** [KVSC21]. **Extended** [CBW<sup>+</sup>21]. **Extending** [Dar12, DY96a, DY96b, DY99, NM22, van95a, van98b, CEI<sup>+</sup>12, PHH<sup>+</sup>12].  
**extensibility** [Kla99]. **Extensible** [BL97a, BCM21, BJM23, CFW17, HCPF95].  
**Extension** [Ngu08c, BSG<sup>+</sup>16, WBS21].  
**Extensions** [Ano98c, Bea98, Dal01, DPSD08, Ras18].  
**extensive** [YMA23]. **Exterior** [BH12].  
**Extract** [PL20]. **Extracting** [HGMC<sup>+</sup>97].  
**extraction** [CGHGRB21]. **Extractive** [VPO19]. **extremely** [CKC23]. **extrinsic** [DMC<sup>+</sup>15]. **Eyringpy** [DCOC<sup>+</sup>19]. **EZFF** [KMK<sup>+</sup>21].  
**F** [Ano00b]. **Faceted** [Kra22]. **facilitating** [Spi18]. **factor** [SZNW23]. **factorisation** [LB22]. **Factorization** [CJ22].  
**factorizations** [Roa23]. **FAD.js** [BB17].  
**fake** [RMM23]. **Fall** [MH18]. **Fan** [RDBC23]. **Fan-Slicer** [RDBC23]. **Fanpy** [KRSD<sup>+</sup>23]. **FAO** [BTDT23, Tho22, TBD23]. **FAO-56** [BTDT23, Tho22, TBD23]. **FAQ** [Ano98e].  
**far** [SDP<sup>+</sup>20]. **far-field** [SDP<sup>+</sup>20]. **Faraway** [Lip21]. **Fast** [BKH<sup>+</sup>22, LV20, Mül13, RDBC23, SMF<sup>+</sup>23, BB17, SSD<sup>+</sup>22, Yes15, MBA19]. **fastcluster** [Mül13]. **Faster** [SN12]. **fastmat** [WSK22]. **FastSPM** [BRF<sup>+</sup>23]. **father** [LS97]. **fault** [WPH<sup>+</sup>22]. **faults** [MLB22, WPH<sup>+</sup>22].

**FDT** [RMM23]. **FDTD** [CKK<sup>+</sup>13]. **feature** [CGHGRB21]. **features** [KMLP<sup>+</sup>23, LTT<sup>+</sup>24, LR14, Pip15]. **Featuring** [SJL18]. **Federated** [DSB<sup>+</sup>23]. **Feedback** [BE20]. **FEM** [GNPP23]. **FEniCS** [LMW12, TT21]. **fenicsR13** [TT21]. **fgivenx** [Han18]. **FIAT** [Kir04]. **Field** [Pat16, Cri18, MFQ<sup>+</sup>21, OC20, SDP<sup>+</sup>20, Wie18, WMA<sup>+</sup>22]. **fields** [CMS22, CFSK14, Mur18]. **Fifth** [CI96]. **file** [VAP<sup>+</sup>21]. **files** [KI19, Ver22a, VAP<sup>+</sup>21, VC18]. **filled** [CBB14]. **Filter** [BHF16]. **filtering** [CV22]. **Finally** [Aya14]. **Finance** [Vir16, Di 13, Hil15b, Wei15, Wep15, Yan14]. **financial** [Yan14]. **find** [MRT<sup>+</sup>22]. **fine** [YHX22]. **fine-grained** [YHX22]. **Finite** [Ano02, LMW12, Ple02, RHM<sup>+</sup>17, TT21, AM10, KRH18a, KRH18b, Kir04, LW10, LWH12, ZMS18]. **FiPy** [GWW09]. **Firedrake** [RHM<sup>+</sup>17]. **First** [CCM<sup>+</sup>23, AM21, GL08b, GL09, HRS06, MSW08, Rad06, SL08, Sha03, TSD<sup>+</sup>12]. **first-class** [TSD<sup>+</sup>12]. **first-principles** [AM21]. **fit** [GH18]. **fitting** [ENCS20]. **fix** [YHX22]. **FL** [Hor22, Lip21, Lip22, Sau23]. **Flask** [Gup15]. **Flexibility** [CFMR19, Gar09, PHH<sup>+</sup>12]. **Flexible** [KB07, BL97b, CSRV13, SAA18, YMCF23]. **floating** [BII<sup>+</sup>20, JT14]. **floating-point** [BII<sup>+</sup>20, JT14]. **Flow** [DB17, HWJ<sup>+</sup>21, MOM21, RDB21, TGEA09, BS21, Par22, YHA<sup>+</sup>16]. **flows** [ML16b]. **Flowtracks** [ML16a]. **fluctuation** [GHKW22]. **Fluent** [Ram15]. **Fluid** [AMB19, CM20, GP22]. **FluidDyn** [AMB19]. **FluidFFT** [MBA19]. **FluidSim** [MBLA19]. **Fluorescence** [RKR21]. **fly** [Cas17]. **fmas** [MD22a]. **fMRI** [WL20]. **foci** [CMS22]. **Fock** [AYI<sup>+</sup>24]. **focused** [CMS22]. **focusing** [DLC23]. **folded** [Kar23]. **Follow** [STS<sup>+</sup>18]. **fondamentales** [Chu07b]. **Force** [OPA<sup>+</sup>14]. **forcefields** [KMK<sup>+</sup>21]. **Forecasting** [HKGvS21]. **foreign** [LWH<sup>+</sup>10]. **forensic** [Hos14, O'C13]. **Forensics** [Hos14, Ano14]. **Forests** [PRH17]. **Form** [ZTT22, GS12]. **formalism** [SP23]. **format** [Fas18]. **formats** [VAP<sup>+</sup>21]. **Formula** [AJJF14]. **Formulation** [Ble20]. **Fortran** [AJJF14, DY99, GH18, GHN19, LC11, MSP<sup>+</sup>22, MMEH08]. **Fortran-77** [GH18, GHN19]. **forward** [MD22a]. **Fotos** [DF00]. **Foundation** [Ngu08c]. **Foundational** [Osa17]. **Foundations** [RG10, RG14, You08, Hor22, Sau23]. **Fourier** [MBA19, BKH<sup>+</sup>22]. **FPGA** [HWJ<sup>+</sup>21]. **FPGAs** [AJYH18]. **fracture** [ZL20]. **fragments** [OA17]. **Frames** [HHJCRB21]. **Framework** [ABCC22, AMB19, FLS<sup>+</sup>20, HA20, Him23, JCL<sup>+</sup>20, JPOB20, LV20, MMT09, Nor17, Ram18a, RBP<sup>+</sup>21, Zuk97, AES<sup>+</sup>22, BCM21, BSG<sup>+</sup>16, BB13, BK19, CM20, DMC<sup>+</sup>15, FMPS17, FKA<sup>+</sup>17, FPN<sup>+</sup>22, GMKRS21, Gar09, GQCP<sup>+</sup>18, IHT23, JNN12, JNN13, JKKN23, KVSC21, KSH14, Kuc98b, Law15, LC11, LGS10, LYX<sup>+</sup>18, Mar17, NT24, OMGDG14, PGM19, RGS<sup>+</sup>21, SV14, SUM21, SAA18, SL20, Tay18, VCLS21, WAK22, ZMS18, dPPD<sup>+</sup>23]. **frameworks** [Dal07, Gup15, MBW07, RCRS06]. **Francis** [Lip21, Lip22]. **Francisco** [ACM92]. **Franklin** [Jan10]. **Free** [Ano00c, Tro96c, Tro96a, Tro96b, Tro97, CFMR19, HFF<sup>+</sup>17, KBC<sup>+</sup>20, OC20, QZWU19, WZZ<sup>+</sup>23, ZRK21, ZRK22]. **Freeway** [SYGY21]. **French** [Chu07b, Chu07a]. **friendly** [BCM21, DDK19, GPP<sup>+</sup>21, LYZ<sup>+</sup>22]. **front** [MP19b]. **front-ends** [MP19b]. **Frontier** [Gue18]. **FSDP** [ZGV<sup>+</sup>23]. **full** [MGFO23, Pip15, PMM<sup>+</sup>13, Wie18, WMA<sup>+</sup>22]. **full-field** [Wie18, WMA<sup>+</sup>22]. **full-waveform** [MGFO23]. **Fully** [ZGV<sup>+</sup>23, AG23]. **Function** [AMPH14, Kor11]. **Functional** [ACM92, Lot15a, MB07, WBK<sup>+</sup>24, BBH<sup>+</sup>15, Cla15, Han18, Her14, MWK<sup>+</sup>20, MCF<sup>+</sup>22, VCF22].

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**Gala** [PW17]. **galactic** [PW17]. **Galerkin** [CBLI22]. **Game** [Gut04, Har07, McG07a, RH15]. **Games** [KM15, MWS18, RH15, Swe09, Ull15]. **Garbage** [GMN21]. **Gas** [Mor17, OOM<sup>+</sup>23, DCOC<sup>+</sup>19, MFQ<sup>+</sup>21, WZZ<sup>+</sup>23]. **gaseous** [ABGD<sup>+</sup>20]. **gate** [JLP23]. **gate-based** [JLP23]. **Gaussian** [SBMD14]. **Ge** [Wei06b]. **Ge-Packt** [Wei06b]. **Gem** [Bri12a, Bri12b, GF18]. **gem5** [RSRT19]. **Gemma** [Cas17]. **gene** [CKC23]. **General** [AJYH18, LS16, NRC23, AZLY18, CFPS23, DCRF23, Myr15, OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, DBdFdSR21]. **General-Purpose** [AJYH18, LS16, DCRF23]. **generalised** [LB22]. **generalized** [MD21, MD22b, SZW<sup>+</sup>22]. **Generate** [Bie97, GTC21, TTHZ23, ZAPS20]. **Generating** [May21, MFQ<sup>+</sup>21, VAP<sup>+</sup>21]. **Generation** [Ano01b, HAB<sup>+</sup>20, JPOB20, AM10, Dal07, DRFB<sup>+</sup>23, FPSZ21, HOB23, LKF23, ML18, OE21, Ras20, RJAL09]. **Generator** [Bri02, AZH<sup>+</sup>24, HR20, MO14, NCS17, WZ18, vd91, Hag17]. **genesis** [TV13]. **Geneva** [IEE97a]. **Genome** [BP17]. **genomic** [GQCP<sup>+</sup>18]. **gentle** [MS13]. **Geodesy** [Ngu08c]. **geometric** [PBN<sup>+</sup>09]. **geometries** [WAN<sup>+</sup>22]. **Geometry** [LDCM23, TEG18]. **Geomstats** [LDCM23]. **Georges** [THG<sup>+</sup>23]. **Georgia** [IEE20, USE00]. **Geospatial** [KHD<sup>+</sup>16, Bah15, Law15, Tom15, Wes15, Tom15]. **Geostatistical** [SMF<sup>+</sup>23]. **Germ** [AAB22]. **German** [Lac06]. **gestalten** [DF00]. **Get** [Wil02, CR15, Cox14, SW15]. **Getting** [BCRS15, Hos12, MAFM21, McG07b, Nai14, Nix15, Ric13]. **GIFT** [SGPHD<sup>+</sup>17]. **GIFT-Grab** [SGPHD<sup>+</sup>17]. **GIMP** [DF00, DF00]. **GIMP-** [DF00]. **Ginzburg** [Hor23]. **GIS** [Bah15, CC20, Law15, Shi07]. **Glade** [Ano01a, Cha01, Ree04]. **glass** [WMM18]. **glasses** [BWMS22]. **Glider** [GRKN<sup>+</sup>19]. **GliderTools** [GRKN<sup>+</sup>19]. **Global** [LVH<sup>+</sup>18, SGZ23]. **Globus** [Jac02]. **GLR** [Dej22]. **GlusterFS** [Dar12]. **GMES** [CKK<sup>+</sup>13]. **GMPY** [Hor15]. **gmx2qmmm** [GPP<sup>+</sup>21]. **GNLStools.py** [MD22b]. **GNU** [DF00]. **Go** [Ano98d, Ram18b, Dan18b, VCR17]. **Golang** [BB22a]. **goniometry** [OLRLB21]. **Good** [Bea09a, Pre03, HB16]. **goodness** [GH18]. **Google** [Pip15, San15]. **GPR** [CKC23]. **GPU** [BKH<sup>+</sup>22, CFCB17, CWLG<sup>+</sup>21, ECS23, JS24, MSP<sup>+</sup>22, NT24, TMH<sup>+</sup>23]. **GPU-accelerated** [ECS23, NT24]. **GPU-acceleration** [JS24]. **GPUCorrel** [CWLG<sup>+</sup>21]. **GPUs** [AJYH18, CBB14, CCFB16, DLC23, VY15]. **Grab** [SGPHD<sup>+</sup>17]. **Gradual** [TSD<sup>+</sup>12, Sie17, VKSB15, VSS17]. **Grafik** [Lin06b]. **Grafik-Modul** [Lin06b]. **Grafiken** [DF00]. **grained** [YHX22]. **GRamian** [Him23]. **Grammar** [MP19b]. **grand** [PHH<sup>+</sup>12]. **grand-canonical** [PHH<sup>+</sup>12]. **grants** [Bal12]. **Graph** [BSSz<sup>+</sup>20, Hag17, JCY<sup>+</sup>19, LS16, Boe17, GF18, KPKS22]. **Graph-Mining** [LS16]. **graph-theoretic** [Boe17]. **GraphBLAS** [PKDM21]. **Graphical** [S JL18, Kar14, MTS<sup>+</sup>18]. **Graphics** [SDS00, GL08b, GL09, PAB<sup>+</sup>97, SML06]. **graphs** [BJM23]. **grasp** [Lot14a]. **Gravitational** [CFPS23, MAC<sup>+</sup>21, Wet20]. **gravitational-wave** [MAC<sup>+</sup>21, Wet20]. **gravity** [MTS<sup>+</sup>18]. **Gray** [Ish17, Sei09]. **Great** [RAH<sup>+</sup>01]. **green** [ADP21]. **Grids** [MSS<sup>+</sup>19]. **groff** [RAH<sup>+</sup>01]. **GROMACS**

[PHH<sup>+</sup>12, GPP<sup>+</sup>21]. **GromPy** [PHH<sup>+</sup>12]. **große** [Haj08]. **Grounding** [MSS<sup>+</sup>19]. **Group** [Lip21, Lip22, SST23, WV22, FSMCFP23, ZC20]. **Grundlagen** [DF00]. **GSAS** [TV13]. **GSAS-II** [TV13]. **GSimPy** [ZC20]. **Gsolve** [MTS<sup>+</sup>18]. **GTK** [DF00]. **GTK-Versionen** [DF00]. **Guest** [Dub07]. **GUI** [Wei06a, Bri02, Con95, GCBDDBF23, Har12, LS98, Sum08, Tal00]. **GUI-Programmierung** [Wei06a]. **Guide** [GRG21, HAB<sup>+</sup>20, HKM08, Lee17, Mit00, Sha24, BS19, Feh02, Gar09, Ish17, Ish19, ICVG14, KN15, Lob19, Lot15b, Meh15, Mil14, RO15a, RG10, RH15, Sum08, Swe13, Tel06]. **Guided** [LP19, FhDAF09, MCF<sup>+</sup>22, Ott18]. **Guido** [Chu02b, Dou98, Kuc98a, Sev15a, Sev15b]. **GUIs** [EK08]. **Gumbie** [Bri02]. **gut** [SKS08]. **Guttag** [Orb18]. **GWpy** [MAC<sup>+</sup>21].

**H** [AYI<sup>+</sup>24, HA20]. **H-Revolve** [HA20]. **H-wave** [AYI<sup>+</sup>24]. **Hack** [Ott18]. **hackers** [O’C13, Sei09, Sei14]. **Hacking** [Swe13]. **Haddad** [Ano00b]. **half** [TMH<sup>+</sup>23]. **Hall** [Lip21, Sau23]. **Hall/CRC** [Lip21, Sau23]. **Halloween** [Cas17]. **Hammond** [Ano00a]. **hand** [Buc15]. **Handbook** [Piñ24, Van16, dos01, Hug01, Lip22]. **Handbuch** [EK08, EK09]. **Handle** [GZT<sup>+</sup>18, CBB14, Var16, VC18]. **Handling** [RDB21, WKS23]. **Handook** [RAH<sup>+</sup>01]. **Hands** [Mil18, Bro06, Cha15, Ros14]. **Hands-On** [Mil18, Bro06, Cha15, Ros14]. **HappyJIT** [HS12]. **Hardback** [Lip21, Liu22]. **Hardware** [GMN21, JPOB20, Dec04, Tab10]. **harmonic** [GEH19]. **harness** [Lay15]. **Harnessing** [VEV<sup>+</sup>19]. **Hartree** [AYI<sup>+</sup>24]. **Hash** [AMPH14]. **Haskell** [CM07, Pop10]. **Hawaii** [HK95]. **hbk** [Lip22]. **hcb** [Sau23]. **HEART** [LKJC21, CRL21]. **Heat** [VEV<sup>+</sup>19, SAA18, Zie19b]. **Heatrapy** [SAA18]. **heavy** [AZH<sup>+</sup>24]. **Hector** [ABC97, WHG17]. **Height** [MH18]. **Held** [HTA<sup>+</sup>97]. **HELM** [MOM21]. **HELMpy** [MOM21]. **Help** [Dör08, HR00, HS13, Law15, Len15]. **Herman** [Cla15]. **Heterogeneous** [BKRT21, HM18, SBC<sup>+</sup>17]. **HexagDLy** [SH19a]. **hexagonally** [SH19a]. **HHVM** [Ott18]. **Hi** [CSZ<sup>+</sup>19]. **Hi-C** [CSZ<sup>+</sup>19]. **Hierarchical** [HA20, Müll13, DB22]. **HIFIR** [CJ22]. **High** [AMGM20, BKRT21, BUS21, CBST24, Dog15, EPF<sup>+</sup>23, GPKL<sup>+</sup>20, GO14, Hin02, Hin03, IEE20, KWBB22, Lew09, LD07, MBLA19, ML16b, NT24, OLRB21, SRS<sup>+</sup>23, BCRS15, BSS16, BS19, CZ22, CFÁA<sup>+</sup>20, GQCP<sup>+</sup>18, GVLD<sup>+</sup>23, HF06, Lan13, Mar18, Par22, Ros13, Ros14, SNB<sup>+</sup>19, BB13, SSH08]. **High-Level** [Hin02, Hin03, GVLD<sup>+</sup>23]. **High-order** [AMGM20]. **High-Performance** [BKRT21, CBST24, KWBB22, MBLA19, SRS<sup>+</sup>23, BCRS15, BS19, CZ22, HF06, Mar18, Par22, Ros13, Ros14, SNB<sup>+</sup>19, SSH08]. **High-Precision** [GPKL<sup>+</sup>20]. **High-Productivity** [BUS21]. **High-throughput** [OLRLB21, GQCP<sup>+</sup>18]. **higher** [MO14]. **highlighter** [BC09]. **highly** [AAYK23]. **Hill** [Lak17]. **Hindi** [VPO19]. **histograms** [GH18, GHN19]. **histolab** [MBA<sup>+</sup>22]. **Historic** [TS14]. **historical** [LPG<sup>+</sup>23]. **Hits** [Sco17]. **hmis** [MB17]. **Holistic** [VFMM08]. **Holographic** [BDF<sup>+</sup>20]. **Holomorphic** [MOM21]. **HoloPy** [BDF<sup>+</sup>20]. **Home** [ABCC22, Ste06]. **Homogeneity** [HMB23]. **Homogeneous** [SBC<sup>+</sup>17]. **homotopy** [VY15]. **Hong** [IEE97b]. **Hosmer** [Ano14]. **hot** [ÇA23, OMGDG14]. **hot-reprogramming** [OMGDG14]. **Houches** [Sta19]. **Hour** [Ngu08b]. **HPC** [MBA19, SLA<sup>+</sup>23]. **HSImage** [BM18]. **HTML** [Bie97, KL97]. **HTML-supporting** [KL97]. **HTML5** [Ada14]. **HTML5-ready** [Ada14]. **HTMLgen** [Ham98]. **Hub**

[ZMD21]. **huge** [Cox14]. **Hughes** [Ano00b]. **humanleague** [Smi18]. **HW** [Wu13]. **HW/SW** [Wu13]. **Hybrid** [CJ22, LP19]. **hydraulic** [ZL20]. **Hydrodynamics** [RBP+21]. **hyogen** [SM04]. **Hyperbolic** [LeV09]. **hyperbox** [KG23, KG23]. **hyperbox-based** [KG23]. **hyperbox-brain** [KG23]. **hyperfine** [BGHC23]. **hyperparameters** [FLR22]. **hyperspectral** [BM18]. **HyPhy** [Spi18]. **HYSPLIT** [War18].

**i-PI** [CMM14]. **IAST** [SSH16]. **Ibrahim** [Ano00b]. **iCorrVision** [FNX22, ddSNX22]. **iCorrVision-2D** [ddSNX22]. **iCorrVision-3D** [FNX22]. **IDE** [Ano01b, SW14]. **Ideal** [SSH16, GP22]. **ideas** [Chu07b, Chu07a]. **identification** [CR22, LRPD18]. **identifiers** [SGZ23]. **IEEE** [CLT20]. **II** [Ang00c, CFPS23, TV13]. **Isignature** [RG20]. **III** [CJ22]. **Ill-Conditioned** [CJ22]. **illustrations** [Lip21, Lip22]. **Image** [Ble20, CWLG+21, FNX22, SLGB14, ddSNX22, GRW+19, LRPD18, MAS+22, RMM23, Myr15]. **Images** [ISMA18, OPA+14, PH23, BM18, TEG18, ZMD21]. **Imaging** [MB07, SBC+17, CG17]. **immediately** [Cha15]. **immunoassays** [VCLS21]. **impact** [LJ19]. **impacts** [LPG+23]. **Impedance** [LYX+18]. **Imperative** [JCY+19, MCF+22]. **imple** [VMRFC23]. **Implement** [Mil18, Wei15]. **Implementation** [BBB02, DD15, HAC+23b, JWHS16, Ngu08a, AWO+21, ABS20, BISC14, CKC23, DEMM19, KL97, KMLP+23, LB22, MR22, OA17, Sco17, Tau16, ZXX24]. **Implementations** [RO15b]. **Implemented** [BHF16, Bra13, Kar14]. **Implementing** [Bri06, EVV12, Nil07b, Zuk97, MD22b, RNR17]. **improve** [ZAPS20]. **Improved** [BBC+24, Sco17]. **improvements** [DPSD08, WMA+22]. **Improving** [Ago01, CFMR19]. **impulse** [FRdN21]. **impulseest** [FRdN21]. **In-Code** [VMFG17]. **In-Cognitive** [KXK+23]. **In-database** [SCAK+19, DDK19]. **in-plane** [FNX22, ddSNX22]. **In-situ** [MFL+22]. **in/dependent** [Kar23]. **Included** [Dub07]. **includes** [Gar09, SML06]. **Including** [MOM21]. **Incomplete** [CJ22]. **independent** [PFH+16, She97]. **Index** [HKGvS21, SL21]. **Indicator** [BLE21]. **indices** [BDQ+22]. **indispensable** [Buc15]. **individual** [NS22]. **industrial** [OBWM23]. **Industry** [Joh15, Mat16]. **Infected** [PH23]. **Infer** [VBB18]. **Inference** [CHM24, SN12, SBMD14, DB22, SAB+20, SMM+22, ZL23, AWO+21]. **inferential** [Hac23a]. **inflationary** [MR18]. **inflow** [ML18]. **informatics** [Sev13]. **Information** [LDCM23, PFLG21, BII+20, Gra18, HGMC+97, JEC18, Sev13, YHA+16]. **Informix** [Ano00c]. **infrastructure** [CZA+23, DDT20]. **Infrastructure-as-Code** [DDT20]. **Inhibiting** [GAS+16]. **InitDAE** [SL21]. **Initiation** [Bai08]. **initio** [CMM14, JPJ+23, KRSD+23, PP23]. **Injecting** [MLB22]. **injection** [WAK22]. **inkl** [The09]. **Input** [Sta21, FRdN21, MD22b, VAP+21]. **Input-Output** [Sta21]. **inputs** [CSRV13]. **ins** [DF00, Est01]. **Insert** [HW19]. **insertions** [WBS21]. **insightful** [Lay15]. **insights** [RO15a]. **inspired** [VBM+18]. **Instabilities** [CYKG23]. **Instant** [WMA12]. **Instantiation** [Ano01b]. **Instrument** [BCE+22]. **Instrumentino** [KSH14]. **instruments** [KSH14]. **insulators** [BMZ+18]. **Integral** [RG20, ŠBA+15, CMM14, CFCB17]. **integrals** [BHJ+18]. **integrate** [CV15, NZPWR22]. **Integrated** [GMN21, FNX22, LFT21, ZWCQ22, ddSNX22]. **integrating** [Bea96, TSC02]. **Integration** [HHJCRB21, Bar22, Dah18c, Els23, LJ23, SHTE23]. **integrations** [Suc13].



**integrators** [MO14]. **integrity** [RS17].  
**Intelligence** [Sa'23, Tan06, DSB<sup>+</sup>23, Lot14b, Seg07].  
**Intelligent** [RM19, ZGL20]. **intensive** [FKA<sup>+</sup>17]. **Inter** [AAC<sup>+</sup>98].  
**Inter-Language** [AAC<sup>+</sup>98]. **interacting** [BG17]. **interaction** [BM18, HHVB21, SH19b]. **interactions** [Kar23, MMEH08]. **Interactive** [BP17, PG07, RAH<sup>+</sup>01, SDS00, Dan18a, DDK19, GP22, Len15, PAB<sup>+</sup>97, RE22, Ros18, Ros13, Ros14, Ull15, Ano00c]. **interatomic** [DBdFdSR21, KMK<sup>+</sup>21]. **interdisciplinary** [SWD15]. **Interface** [ACM97, DGMP09, LD19, SJL18, BLN<sup>+</sup>21, CMM14, DOS17, DMD<sup>+</sup>21, GPP<sup>+</sup>21, Gre18, GTC21, HJPB17, HHP<sup>+</sup>16, Jac02, LPH23, MTS<sup>+</sup>18, Pit18, PHH<sup>+</sup>12, PWF17, RK19, Spo12, VMRFC23, WZ18, WHG17, vdOJP<sup>+</sup>20]. **Interfaces** [Ano01a, Cha01, LWH<sup>+</sup>10, Smi17, Smi18, Wet20]. **interfacial** [CM20, SHFJ18]. **interferometric** [HJPB17]. **interferometers** [BJR<sup>+</sup>20]. **intermetallic** [DMC<sup>+</sup>15]. **International** [Ano97c, CI96, IEE97b, IEE97a, IEE20].  
**Internet** [DF00, Joh97, The09, Wei06b, Ano97b, DAJ<sup>+</sup>15, McG98b, Shi07, SST23, WvA96].  
**Internet-Programmierung** [Wei06b].  
**Interpolation** [BKH<sup>+</sup>22, CZ22].  
**interpretation** [ZXZX22]. **interpreted** [BKC14]. **Interpreter** [ZXX23, van98b, CM07, PSGL21, van95a].  
**interpreters** [HWW<sup>+</sup>15, LFYX23, MD15, ZLBF14].  
**interstellar** [Gre18]. **interval** [SABEh20].  
**interval-valued** [SABEh20]. **Intervals** [DF21b, PRH17]. **Interviews** [Kuc98a].  
**intricacies** [Lot14a]. **intrinsic** [DMC<sup>+</sup>15].  
**Introducing** [BC09, GL07a, HRS06, Lub14].  
**Introduction** [Bau96, Dub07, Ful96, Gut13, Gut16, Har12, Has16, Ngu08b, SWD15, SMM<sup>+</sup>22, Tan06, ÜK12, War18, vRD05b, Can14, Joh12, MS13, Poo16, Rad06, Sto13, Sum09, Sum10, vRD03, Orb18].  
**Introductory** [KLM14, KLM15, MMP<sup>+</sup>22, WX18, LFT09, MBK09, RMZG06].  
**Intuitionistic** [WKS23]. **Intuitive** [Hug14, KRH18a, KRH18b]. **invariant** [LGS10]. **invariant-driven** [LGS10]. **inventing** [Hos14]. **Inverse** [LD19]. **inversion** [MGFO23, NL23]. **Investigates** [Ano95]. **Investigation** [SS13]. **Investment** [GMKRS21]. **invited** [Sie17]. **involving** [SAA18]. **IO** [Buc14]. **IOData** [VAP<sup>+</sup>21]. **ion** [BFT20]. **ionization** [SZNW23]. **ionosphere** [ZRK21, ZRK22]. **IoT** [ABCC22, TAD23, ZGL20]. **IPython** [Ber13, PG07, Ros13, Ros14]. **irt** [LR23].  
**ISBN** [Ano13, Ano14, Ano15a, Ano15b, Cla15, Hor22, Lee17, Lip21, Lip22, Liu22, Sa'23].  
**Ising** [LD19, LD19]. **Ising-Type** [LD19].  
**isoconversional** [RHLTG<sup>+</sup>22]. **isosurface** [MZL<sup>+</sup>23]. **isothermal** [RHLTG<sup>+</sup>22].  
**isotropic** [Mur18]. **issues** [GMP<sup>+</sup>20]. **Item** [LR23]. **Iterated** [RG20].  
**Iterated-Integral** [RG20]. **Iterative** [CJ22, BHA18]. **iterators** [ZLBF14]. **Ivezić** [Ish17]. **Izzet** [Ano01a].  
**J** [Ano00b, Ano13, Ish17]. **J**. [Lip21]. **Jacob** [Ish17]. **Jacobian** [NCS17]. **Jacquez** [JWHS16]. **January** [HK95]. **Janus** [KFV20]. **Java** [SML06, SKS08, AAYK23, Ang99, Ano00c, Ano01b, Ano20, ADP21, BLS<sup>+</sup>23, Dan18a, HF06, Hig03, Hug97, MSR03, Pre03, Rem01b, Roo97, SM04, Stu07, Tro97, Wil05, Zho97]. **Java-Compliant** [Ano01b]. **JavaScript** [Ric14, CASA22, Dan18a, Gar09, ZMD21]. **JCanvas** [Ano01b]. **JDBC** [Tan01]. **jedem** [Wei06a]. **JeLLyFysh** [HQF<sup>+</sup>20]. **Jesse** [Lee17]. **Jinn** [LWH<sup>+</sup>10]. **JIT** [ABF13, BBH<sup>+</sup>15, BB17, CEI<sup>+</sup>12, HS12, Ott18, PFH<sup>+</sup>16, ZXX24]. **JIT-based** [BB17, PFH<sup>+</sup>16]. **John** [Jan10, Orb18]. **Jose** [Ano97c, Liu22]. **JPython** [Ang99].

**JSON** [BB17]. **Jug** [Coe17]. **Julia** [BCRS15, BSS16, Bal18, BS19, BCC<sup>+</sup>18, CLMM20, Dan18a, DD15, GMP<sup>+</sup>20, GVLD<sup>+</sup>23, Jos16, KRH18a, KRH18b, Lob19, MSP<sup>+</sup>22, MT18, MT19, MSS<sup>+</sup>19, Nag17, PKDM21, Roh16, Sal18, She15b, SNNB17, Ver22b, ZV19]. **Julian** [HKGvS21, Lip21]. **Julian-Oscillation** [HKGvS21]. **July** [Ano01a, Ass96]. **Jump** [MH18]. **Junction** [SN12]. **June** [ACM92, CLT20, USE96]. **Jupyter** [Bar21, Dan18a, Moo21]. **JupyterLab** [Dan18a]. **Just** [NM22, RF16, Wil97a, LJ19, May21, TTS<sup>+</sup>10, WMA12]. **Just-in-time** [NM22, RF16, LJ19, TTS<sup>+</sup>10, WMA12]. **Justin** [Ano15a]. **Jython** [PR02, Bri02, Hig03].

**Kapitel** [Wei06a]. **Kateri** [Hor22, Sau23]. **KDE** [Ano00c]. **Keeping** [Chu02a]. **Keith** [Lip22]. **Kernel** [Ago01, Ano01a]. **kernels** [SZW<sup>+</sup>22]. **key** [BM15, RS17]. **key-based** [RS17]. **keynote** [McK16]. **Kids** [Lin06b]. **Kinder** [Lee17]. **Kinect** [TCE21]. **kinetic** [LWV20]. **KineticPy** [MWM20]. **kinetics** [MWM20, NCS17, RHLTG<sup>+</sup>22]. **KinZ** [TCE21]. **kisses** [Bri12a, Bri12b]. **kit** [SHTE23]. **KitY** [SHTE23]. **Kivy** [Ull15]. **Klassen** [Wei06a, Wei06b]. **kMap.py** [BYL<sup>+</sup>21]. **Know** [MAFM21]. **Knowbot** [HMD<sup>+</sup>96]. **Knowledge** [CHM24]. **Knowledge-Based** [CHM24]. **Kokkos** [GVLD<sup>+</sup>23]. **Kong** [IEE97b]. **Korner** [Ago01]. **Kubo** [SP23]. **kurz** [SKS08].

**L** [Har07]. **lab** [Rad06, AG23]. **lab-based** [Rad06]. **labeled** [HH17]. **labeling** [DRFB<sup>+</sup>23]. **laboratories** [MCGK19]. **laboratory** [AG23]. **Lady** [Bri12a, Bri12b]. **lagrangians** [May21, May21]. **LALSuite** [Wet20]. **LAMMPS** [DCRF23]. **Land** [KFV20]. **Landau** [Hor23]. **Landscape** [CBST24]. **landscapes** [MWM20, WM21]. **Lane** [SYGY21]. **Langages** [Bla02].

**Language** [AAC<sup>+</sup>98, Ano95, BKL09, CL06, Ful96, HC16, Het10, Het14, LD07, Lut98a, PFH<sup>+</sup>16, RM19, Rie09, Roo97, Sco09, SS13, Tro96c, ZV19, van98a, vRD05a, AJJF14, BCRS15, BS19, BBH<sup>+</sup>15, Bor07, CLM05, Can14, CEI<sup>+</sup>12, CGK11, Dec04, DY96a, Fee16, GMP<sup>+</sup>20, HWW<sup>+</sup>15, IOC<sup>+</sup>12, KRH18a, KRH18b, LS97, LWH<sup>+</sup>10, LGS10, MR07, Nel15, Ngu08d, Och09, Or197, Per14b, SL08, SNB<sup>+</sup>19, She97, Sum09, Sum10, vd91]. **Language-independent** [PFH<sup>+</sup>16]. **Languages** [Ano98d, CG23, Dör08, ESM98, Mar21, Pre00, Pre03, PBB22, Bea96, BL97b, BDT13, BKC14, Cas20, CEI<sup>+</sup>12, DTM<sup>+</sup>18, FhDAF09, GLS<sup>+</sup>10, HPH12, LS97, Mau02, MRG18, Ngu08e, OMGDG14, RF16, Wu13, YPB16]. **Large** [vdOJP<sup>+</sup>20, BL97b, BCG05, Var16]. **Large-Eddy** [vdOJP<sup>+</sup>20]. **large-scale** [BL97b]. **laser** [EBNS22]. **Lasso** [HHJCRB21]. **LAST** [Sco17]. **Latency** [PBK22]. **latest** [Cas20]. **Lattice** [DBdFdSR21, Mor17]. **Lattice-Gas** [Mor17]. **lattice\_mc** [Mor17]. **Laughs** [Wil97a]. **LAVA** [DCRF23]. **Layer** [AAB22]. **layers** [CBB14]. **Lazily** [Har15]. **LazySorted** [Har15]. **Learn** [Cha15, Don14, Ros13, CV15, HS13, Idr14, Mad15, Nai14, Sal18, Swe09, ZKB<sup>+</sup>08]. **Learned** [Wit21]. **Learning** [Ada14, AVS20, Arb14, BW14, CBST24, Dan18a, Duf15, Gun14, Hia15, Hil15a, Hil20, Hug99, JCY<sup>+</sup>19, LV20, Lay15, Len15, LA99, LA04, Lut08, Lut09a, Lut09b, Lut13, MH15, OOM<sup>+</sup>23, RM19, Ros13, SW15, TAD23, BSS16, BCM21, Bow15, CR15, DSB<sup>+</sup>23, GMP<sup>+</sup>20, Har07, Ish17, ICVG14, Kar14, KG23, PDS<sup>+</sup>22, RS17, RO15a, Ras18, Sal18, SCAK<sup>+</sup>19, SHTE23, WRBT21, ZL23, dPPD<sup>+</sup>23, Roa23, Lak17, Laz22]. **learning-assisted** [WRBT21]. **LEED** [GDP18]. **LEEM** [GDP18]. **Lefever** [MD21]. **LegacyJ** [Ano01b]. **Legate** [BLP<sup>+</sup>21]. **LEGOs** [BMK03]. **Leitfaden**

[Haj08]. **lepton** [AZH<sup>+</sup>24]. **leptons** [SLP<sup>+</sup>22]. **Lessons** [CG23]. **lets** [Cas17]. **Letter** [Gar98]. **Letters** [RAH<sup>+</sup>01]. **Level** [Hin02, Hin03, GVLD<sup>+</sup>23, LFT21, NT24, Myr15]. **leverage** [BSS16, LR14, PM23, SW14]. **LHC** [BB13]. **Libraries** [MLGW18, MBA19, PBB22, Bah15, Hig03, She97, Wes15, Wet20]. **Library** [AMGM20, BTR14, BKH<sup>+</sup>22, CZZ19, CHG<sup>+</sup>16, CR12, HGHR20, HC16, HAGH18, ISMA18, LR23, LS16, Lun01, Moo21, PL20, RG20, TLR21, ZTT22, AM19, Ada14, BW22, BWS23, BG17, BJM23, BB22b, BDQ<sup>+</sup>22, BM18, Cri18, DM20, EPF<sup>+</sup>23, FPSZ21, Gre16, HJHZ18, HTH<sup>+</sup>20, HU17, HOB23, HBA<sup>+</sup>20, HB16, JAGP14, JLP23, JT14, KL97, KRSD<sup>+</sup>23, KMK<sup>+</sup>21, LRPD18, LB22, LRvE17, LWH12, MBA<sup>+</sup>22, May17, MRT<sup>+</sup>22, MMP11, MK16, NZPWR22, DDT20, PBN<sup>+</sup>09, Ras20, RV20, RJAL09, RFG13, RC18, SKS23, SLDF<sup>+</sup>21, SH17, THG<sup>+</sup>23, TOPC23, TF23, Ull15, VAP<sup>+</sup>21, WAN<sup>+</sup>22, WKS22, Yes15, YMCF23, YMA23, ZMS18, Zie19b, van95b, BLE21]. **Life** [Has16, Yan14]. **light** [MR22]. **lightweight** [Bah15, CBLI22, Gar09, RGS<sup>+</sup>21, RFG13]. **Like** [Dow15, Dow09, SG18]. **Line** [CC20, IG19, Har07, Har07]. **Linear** [Luk23, PBB22, SBMD14, TT21, AGMFGE23, BCG05, CFSK14, Dah18b, FPN<sup>+</sup>22, LKJC21, RV20, SLB<sup>+</sup>23, WSK22, Lip21]. **linear-operator** [RV20]. **Lines** [HAB<sup>+</sup>20]. **linguistics** [Joh08]. **Linking** [vd91]. **Linux** [Ano00b, DF00, Ric14, USE00, Ago01, Ano00b, Ano00c, Bla02, Bla04, GJ08, Lac06, MS<sup>+</sup>00, Par11, RAH<sup>+</sup>01, TSC02]. **Linux-basierte** [Ric14]. **LIon** [BFT20]. **lipid** [WRBT21]. **liquids** [VCF22]. **Lisp** [ACM92, Mac91, Mac92a, Mac92b]. **List** [Har15]. **lists** [Ano20]. **literature** [HSD<sup>+</sup>22]. **litstudy** [HSD<sup>+</sup>22]. **little** [VSS17]. **LJ** [Kuc98a, RAH<sup>+</sup>01]. **LLNL** [Ano98c]. **LLNL-Distributed** [Ano98c]. **LLVM** [RSRT19]. **LLVM-Based** [RSRT19]. **Load** [MOM21]. **Local** [LFT21]. **locality** [BII<sup>+</sup>20]. **localization** [IHT23, WPH<sup>+</sup>22]. **Log** [RG20]. **Logging** [Kra22]. **logic** [Bro06, CKC23]. **long** [MWM20]. **long-time** [MWM20]. **Look** [CCM<sup>+</sup>23]. **Loop** [ABF13, LS17, RCAE<sup>+</sup>20, Ver22a, XGW23]. **Loop-aware** [ABF13]. **Loosa** [RAH<sup>+</sup>01]. **Lorentz** [FH22]. **loss** [SZW<sup>+</sup>22]. **Love** [Wit21]. **Low** [Fun23, GDP18, ZAPS20]. **Low-Code** [Fun23]. **low-dimensional** [ZAPS20]. **Low-energy** [GDP18]. **lower** [ZRK21, ZRK22]. **LR** [Dej22]. **LR/GLR** [Dej22]. **LSKUM** [MSP<sup>+</sup>22]. **LSPR** [CFCB17]. **Lua** [Gut04]. **Lugiato** [MD21]. **luminescence** [TR22]. **Lunch** [Ang00a]. **Lutz** [Ano97a].

**M** [Jan10, Lee17, Wep15]. **Mac** [SML06, Wal07]. **Machine** [Bow15, CBST24, OOM<sup>+</sup>23, TAD23, CFW17, CR15, GMP<sup>+</sup>20, Ish17, ICVG14, Kar14, KG23, MRG18, PDS<sup>+</sup>22, RS17, RO15a, Ras18, Sal18, SCAK<sup>+</sup>19, SHTE23, WRBT21, ZL23]. **machines** [MRG17, PFH<sup>+</sup>16]. **Madden** [HKGvS21]. **Made** [CX23, RG00, AW06, Cox14]. **Magallanes** [Liu22]. **magcoilcalc** [MFQ<sup>+</sup>21]. **MAGICC** [GWM18]. **magnet** [MFQ<sup>+</sup>21]. **Magnetic** [MB07, CFW17, HHVB21, MFQ<sup>+</sup>21, OC20]. **Magni** [OPA<sup>+</sup>14]. **Magpylib** [OC20]. **maintainability** [LTT<sup>+</sup>24]. **maintaining** [RS17]. **major** [WMA<sup>+</sup>22]. **major**s [Guz03, HHK<sup>+</sup>09]. **make** [Mad15]. **makes** [Kla99]. **Making** [Dal01, DDK19, HGHR20, SSS22, SKS23, Swe09, WKS23]. **Man** [OOM<sup>+</sup>23]. **Man-in-the-Middle** [OOM<sup>+</sup>23]. **manage** [RC18]. **Management** [Ano97d, Ano00c, BBB02, CCM<sup>+</sup>23, IG19, KDC<sup>+</sup>18, ML16a, AW06, Hos12, JAGP14, SFC23]. **Managing** [Por03, PMBF17]. **Manifolds** [HAGH18, ZAPS20]. **manipulate** [GZT<sup>+</sup>18]. **Manipulation** [Mil18, RDB21]. **ManPy** [DPH16]. **Manual**

[DF00, van98c, vRD05a, Mac91, Mac92a, van95c, HYG16]. **Manuel** [Liu22]. **manufacturing** [DPH16]. **Many** [HGHR20, Kra22, Gra18]. **many-body** [Gra18]. **Many-Faceted** [Kra22]. **Many-Objective** [HGHR20]. **map** [KXK<sup>+</sup>23]. **Maple** [GS12]. **mapped** [Fas18]. **Mapping** [PBB22, ZTT22, GRW<sup>+</sup>19, HK15, MZL<sup>+</sup>23, Tom15, WM21]. **maps** [Gre18]. **March** [HTA<sup>+</sup>97]. **Marginalization** [SN12]. **Maria** [Hor22, Sau23]. **Mark** [Ano97a, Ano00a]. **Markdown** [XDR21, LKJC21]. **Marketing** [Mil15]. **Mass** [SN12, Ras20, Wha18]. **Massive** [DRFB<sup>+</sup>23]. **massively** [BSG<sup>+</sup>16, Mos20a]. **master** [Ada14, Meh15, Pip15, Zac15]. **Mastering** [Dog15, Het14, Kas15, LR14, Lot14a, Mad15, Meh15, Rom14, She15b, Wei15, BJ14a, Het10, Tid07]. **Matching** [Hig22, KDC<sup>+</sup>18, KB18]. **MatchingTools** [Cri18]. **MatchPy** [KB18]. **MatCoupLy** [Roa23]. **material** [DCRF23, PP23, SNNB17]. **Materials** [VEV<sup>+</sup>19, PSG12, SLDF<sup>+</sup>21, TQGE23, VMRFC23, WM21]. **Math** [Ano15b, Sah15]. **Mathematica** [Sta19]. **Mathematical** [SdSS16, SMT<sup>+</sup>21, Wei15]. **Mathematics** [LL08]. **MATLAB** [KMLP<sup>+</sup>23, MSS<sup>+</sup>19, CLMM20, TCE21]. **Matplotlib** [RC18, Tos09, Nel15]. **Matrices** [FSZD20, Wim12, FM16, MRT<sup>+</sup>22]. **matrix** [HJHZ18, LB22, Roa23, SH17]. **matter** [May21, Sch21]. **maximize** [MRT<sup>+</sup>22]. **Maximum** [LD19, SR19]. **Maxwell** [CKK<sup>+</sup>13]. **May** [Ano97d, Ano01a, Eur91]. **Maya** [Gal14]. **Maybe** [How06]. **mcda** [WBS22]. **McNulty** [Lip22]. **MCycle** [Hug18]. **MD2D** [LN23]. **Mead** [PP23]. **means** [SLA<sup>+</sup>23]. **measurements** [FNX22, MTS<sup>+</sup>18, ddSNX22]. **Measuring** [ÅW16, KCS11, DDT20, ZC20]. **mechanical** [SLDF<sup>+</sup>21]. **Mechanics** [Ble20, BWMS22, MS15, GPP<sup>+</sup>21]. **mechanics/Gromacs** [GPP<sup>+</sup>21]. **mechanochemical** [DyH21]. **MechElastic** [SLDF<sup>+</sup>21]. **media** [BVV22, Guz03]. **Mediator** [Far02]. **Mediator/Python** [Far02]. **Medical** [ISMA18, SBC<sup>+</sup>17, SML06]. **medium** [LRvE17]. **medium-sized** [LRvE17]. **Meep** [LFN<sup>+</sup>11]. **meets** [ZXX24]. **membranes** [WRBT21]. **memory** [Fas18, SSH08, SZW<sup>+</sup>22, Tab10]. **memory-mapped** [Fas18]. **mental** [SG07, TTHZ23]. **Merging** [SYGY21]. **mesh** [GS12, HR20]. **meshfree** [MSP<sup>+</sup>22]. **message** [BL97a]. **Meta** [Tro96b, Le 24, MD15]. **meta-analyses** [Le 24]. **meta-compilation** [MD15]. **MetaCluster** [TOPC23]. **metagraphs** [RNR17]. **metaheuristic** [TOPC23]. **metaheuristic-based** [TOPC23]. **Method** [HFB21, LMW12, MOM21, RHM<sup>+</sup>17, BE20, CWC<sup>+</sup>23, CKK<sup>+</sup>13, DEMM19, KXK<sup>+</sup>23, LKK23, LB22, SNNB17]. **Methodologists** [Dör08]. **Methods** [Gez20, Gez23, LT03, MS07, Nor17, AES<sup>+</sup>22, AM10, BW22, BWS23, FL15, GF18, KRH18a, KRH18b, KRSD<sup>+</sup>23, Kiu10, Kiu13, MSV23, VCLS21, WKS22, You08]. **metrics** [Gre16]. **MFDFA** [GHKW22]. **MGRIT** [HFB21]. **MGtoolkit** [RNR17]. **microcontrollers** [Ano19]. **microframework** [VBM<sup>+</sup>18]. **Microscopy** [BDF<sup>+</sup>20, OPA<sup>+</sup>14]. **MicroStructPy** [HR20]. **microstructure** [HR20]. **microsynthesis** [Smi18]. **mics** [BLE21]. **mics-library** [BLE21]. **Middle** [OOM<sup>+</sup>23]. **migration** [Fee16]. **migrations** [Lot15b]. **Milestone** [SV14]. **minimal** [May21]. **minimal-lagrangians** [May21]. **Minimum** [Hig22]. **Minimum-Weight** [Hig22]. **Mining** [LS16, sR11, Rus14, YHX22, Ish17, ICVG14, Lay15]. **Minkowski** [BT21]. **Minneapolis** [HTA<sup>+</sup>97]. **Minolta** [Ano00c]. **Misconception** [RAH<sup>+</sup>01]. **Mitch** [Ano01a]. **Mitchell** [Mit00]. **MitM** [OOM<sup>+</sup>23]. **Mix** [Est01]. **Mix-ins** [Est01].

**Mixed** [TT21]. **mixes** [LPG<sup>+</sup>23]. **ML** [ZL23]. **MLLPA** [WRBT21]. **MLxtend** [Ras18]. **mmappickle** [Fas18]. **MN** [HTA<sup>+</sup>97]. **MO** [Cas17]. **mob** [CS21]. **Mobile** [ST<sup>+</sup>07, CS21, HMD<sup>+</sup>96, Len15]. **MobileNetV2** [PH23]. **MobileNetV2-BiLSTM** [PH23]. **Modal** [PARS22]. **Mode** [CR12, DTR18]. **Model** [BTR14, CFMR19, EML21, PH23, War18, ABS20, CVV23, GWM18, Hen08, JPJ<sup>+</sup>23, May21, RBV16, WZZ<sup>+</sup>23, WHG17, Bie21]. **Model-based** [CFMR19]. **Modelica** [DRFB<sup>+</sup>23, Ern99]. **ModelicaGridData** [DRFB<sup>+</sup>23]. **Modeling** [Ano01b, AJH<sup>+</sup>12, DDMS14, HGHR20, ISMA18, JPOB20, KfV20, KB07, Laz22, Lip22, Mil14, Piñ24, RSRT19, Tie16, YH21, ZV19, BK19, BMZ<sup>+</sup>18, GG21, HHM18, HCPF95, KN15, Mar17, MFQ<sup>+</sup>21, Mil15, NZPWR22, PSGL21, PGM19, Ros18, SFC23, WMM18, YMCF23, YMA23, Lee17, Ish19]. **Modelling** [PHF10, SMT<sup>+</sup>21, BVV22, BJR<sup>+</sup>20, LFT21, PBN<sup>+</sup>09, Tay18]. **Models** [HM18, LD19, Lip21, SBMD14, ZV19, DPH16, DSB<sup>+</sup>23, DB22, GKK<sup>+</sup>23, GVLD<sup>+</sup>23, Kar14, KVSC21, Lay15, MD22b, MD22a, SG07, NRC23]. **Modern** [Sev15b, AJJF14, Lub14, MS15, Mit15, TV13]. **moderne** [LAG07]. **modernize** [Lot15b]. **modified** [KSS20]. **modify** [Kno08]. **modred** [BTR14]. **Modul** [Lin06b]. **Modular** [CFW17, HYG16, MBLA19, BST<sup>+</sup>17, CJGA23, HPT<sup>+</sup>16, KSH14, THG<sup>+</sup>23]. **Modularisierung** [EK08]. **Module** [AAB22, Ham98, KB07, MD17, Mor17, SBMD14, TGEA09, Wei06b, BS21, BGHC23, CGHGRB21, CR22, CWC<sup>+</sup>23, CWM<sup>+</sup>21, DyH21, Fas18, LN23, MCGK19, MD22b, PARS22, PHH<sup>+</sup>12, Tom15, WRBT21]. **modules** [Idr14]. **moisture** [MPMC21]. **molecular** [CMM14, DFC18, DPF<sup>+</sup>21, FC17, HCPF95, KMK<sup>+</sup>21, LHH<sup>+</sup>21, LN23, SHFJ18, SSD<sup>+</sup>22, SZNW23, VCF22, Yes15]. **molecule** [IHT23]. **molecules** [BGHC23]. **moment** [SR19]. **MongoDB** [HW19]. **monitor** [GCBDDBF23]. **monitoring** [MGFO23]. **Monograph** [Anoxxc]. **Monte** [ABGD<sup>+</sup>20, DMD<sup>+</sup>21, DEMM19, HQF<sup>+</sup>20, JKKN23, KXK<sup>+</sup>23, Mor17, Nil07b, PHH<sup>+</sup>12, WAN<sup>+</sup>22]. **MontePython** [Nil07b]. **Monterey** [Ass96]. **monty** [PMM<sup>+</sup>13]. **Moodle** [Rad08]. **morphodynamics** [CVV23]. **MoSDeF** [DMD<sup>+</sup>21]. **most** [Cox14, LR14]. **Motifs** [AAB22]. **movies** [BRF<sup>+</sup>23]. **moving** [FH22]. **MPI** [DPS05, DPSD08, DFSW19, NO23]. **MPI-2** [DPSD08]. **MPI-parallelized** [DFSW19]. **mpi4py** [DF21a]. **mpmath** [JT14]. **mpnum** [SH17]. **Multi** [Evv12, GMS17, Kra22, MLGW18, Och09, Pul00, Sta21, BHJ<sup>+</sup>18, Fee16, FPN<sup>+</sup>22, KMK<sup>+</sup>21, LRPD18, LYZ<sup>+</sup>22, MTPHH18, QZWU19, SUM21, SGPHD<sup>+</sup>17, SKS23]. **Multi-Agent** [Evv12]. **Multi-Case** [Kra22]. **multi-channel** [SGPHD<sup>+</sup>17]. **multi-class** [LYZ<sup>+</sup>22]. **multi-configuration** [QZWU19]. **multi-criteria** [SKS23]. **multi-energy** [SUM21]. **multi-image** [LRPD18]. **Multi-language** [Och09, Fee16]. **multi-objective** [FPN<sup>+</sup>22, KMK<sup>+</sup>21]. **Multi-Processing** [MLGW18]. **Multi-Regional** [Sta21]. **Multi-Robot** [GMS17]. **multi-scale** [BHJ<sup>+</sup>18]. **Multi-Threaded** [Pul00]. **Multi-Threading** [MLGW18]. **Multiclass** [HJHZ18]. **Multicomplex** [AMGM20]. **multicoordinate** [LKK23]. **multideterminant** [KRSD<sup>+</sup>23]. **multidimensional** [Bar22]. **Multidisciplinary** [MMT09, HHK<sup>+</sup>09]. **Multidual** [AMGM20]. **MultiFLEXX** [MTPHH18]. **multiflexlib** [MTPHH18]. **multifractal** [GHKW22]. **multigrid** [BISC14]. **Multilane** [SYGY21]. **multilayered** [BVV22]. **multimedia** [GFB<sup>+</sup>14]. **multimodal** [AES<sup>+</sup>22, SL20].

**multiphysics** [BSG<sup>+</sup>16, LPH23]. **Multiple** [Kor11, MP19b, BLE21]. **Multiple-Precision** [Kor11]. **Multiprocessing** [SMF<sup>+</sup>23, AFL23]. **Multiscale** [LWV20]. **Multithreaded** [MAG21]. **multithreading** [Swi09]. **Multivariate** [Sha24, ASAA20, CSRV13]. **MultiZ** [AMGM20]. **munuSSM** [Bie21]. **music** [HOB23, MBK09]. **Musicaiz** [HOB23]. **Musterlösungen** [Wei06a]. **MVTS** [ASAA20]. **MVTS-Data** [ASAA20]. **MWA** [HYG16]. **MyHDL** [Dec04]. **Myro** [Men09]. **MySQL** [Bis01, HF06, TSC02]. **Mython** [Rie09].

**N** [VMRFC23]. **named** [ESM24]. **Names** [RAH<sup>+</sup>01, AAYK23, Sta17]. **nano** [WMA<sup>+</sup>22]. **nano-optics** [WMA<sup>+</sup>22]. **NanoNET** [KVSC21]. **nanoparticle** [WAK22]. **Nanophotonics** [BVB<sup>+</sup>07]. **nanostuctures** [Wie18]. **Nansat** [KHD<sup>+</sup>16]. **NAS** [DLC23]. **Native** [Kra22]. **Natter** [SLGB14]. **Natural** [BKL09, DD15, RM19, SLGB14, Per14b]. **nature** [VBM<sup>+</sup>18]. **nature-inspired** [VBM<sup>+</sup>18]. **NCBI** [HM22]. **Ncpol2sdpa** [Wit15]. **need** [Cha15]. **Needs** [Mar21]. **negative** [LB22]. **Nelder** [PP23]. **Nelson** [Lee17]. **Neo4j** [Gup15]. **Neper2CAE** [GTC21]. **NESSie.jl** [KRH18a, KRH18b]. **Nest** [Dub05]. **Nested** [BFM18]. **nests** [RCAE<sup>+</sup>20]. **Net** [Bis01]. **NetLogo** [GG21]. **Network** [Ago01, Ano00c, BBB02, GRG21, HW19, LS16, Ngu08a, SYGY21, SST23, VBI<sup>+</sup>23, XL18, AW06, CC20, FL06, GL07a, Gre16, HK15, RG10, RG14, Sar14, SW15, WZ18]. **Networking** [IEE20]. **Networks** [KSB12, OOM<sup>+</sup>23, SJK<sup>+</sup>21, VBB18, BS21, Boe17, BB22b, CJGA23, Mül23, FLR22, KMLP<sup>+</sup>23, MDR<sup>+</sup>22]. **Netzwerkkommunikation** [EK08]. **Neural** [FLR22, MDR<sup>+</sup>22, SJK<sup>+</sup>21, VBI<sup>+</sup>23, BB22b, CJGA23, MCF<sup>+</sup>22]. **neural-guided** [MCF<sup>+</sup>22]. **neurophysiology** [NMGB17]. **Neuropsydia.py** [MD17]. **NeuTomPy** [MMG19]. **neutral** [AZH<sup>+</sup>24, SLP<sup>+</sup>22]. **neutrino** [AZH<sup>+</sup>24]. **neutrino-nucleus** [AZH<sup>+</sup>24]. **neutron** [MTPHH18]. **neutrosophic** [SABEh20]. **NeuVis** [Ano01b]. **New-Style-Klassen** [Wei06b]. **News** [HPT<sup>+</sup>16, LRvE17, PHH<sup>+</sup>12, Sav23, She15a, Yes15]. **Next** [Dal07]. **Next-generation** [Dal07]. **NiaPy** [VBM<sup>+</sup>18]. **NiceProp** [GP22]. **NIST** [Ano95]. **NJ** [Lee17]. **NL4Py** [GG21]. **NLKT** [Per14b]. **NLP** [PF22]. **NLTK** [Per14b]. **NNetEn** [VBI<sup>+</sup>23]. **No** [Ano15a, Ano15b, Wat95]. **NOAA** [War18]. **noble** [MFQ<sup>+</sup>21]. **node** [KPKS22]. **nodes** [GVLD<sup>+</sup>23, PP23, PP23]. **noise** [MD22b]. **noisy** [May17]. **Noisyopt** [May17]. **nomisweb** [Smi17]. **non** [Dah18b, FRdN21, GP22, GEH19, Guz03, LB22, NO23, RHLTG<sup>+</sup>22, SLB<sup>+</sup>23, ZRK21, ZRK22, KMLP<sup>+</sup>23]. **non-auroral** [ZRK21, ZRK22]. **non-contiguous** [NO23]. **non-ideal** [GP22]. **non-isothermal** [RHLTG<sup>+</sup>22]. **non-linear** [Dah18b, SLB<sup>+</sup>23]. **non-majors** [Guz03]. **non-negative** [LB22]. **non-parametric** [FRdN21, KMLP<sup>+</sup>23]. **non-uniformly** [GEH19]. **Noncommuting** [Wit15]. **Nonlinear** [MS07, RPL<sup>+</sup>23, KF23, MD22b, MMP11]. **nonlocal** [KRH18a, KRH18b]. **nonsense** [Huc18]. **normalization** [BBHB22, SABEh20]. **Norway** [Eur91]. **Nostril** [Huc18]. **Notation** [TS14]. **Notions** [Chu07b, Chu07a]. **November** [IEE20]. **Novice** [Sma12, Het05, Het08, McG07a]. **Novonix** [GPKL<sup>+</sup>20]. **noWorkflow** [PMBF17]. **npm** [CASA22]. **NSDPY** [HM22]. **nuclear** [WZ18]. **nucleon** [Kar23]. **nucleus** [AZH<sup>+</sup>24]. **Numba** [GVLD<sup>+</sup>23, KWBB22]. **Numbers** [AMGM20]. **Numeric** [MLGW18]. **Numerical**

[Bar22, BT06, CYKG23, DHH96, Gez20, Gez23, HJK<sup>+</sup>24, HM18, Joh15, Kiu10, Kiu13, LT03, Ram18a, Wim12, BHJ<sup>+</sup>18, Bra13, Dah18c, DFSW19, LJ23, MS15, ML16b, Ros13, Ros14, WAK22, Mat16]. **numerically** [Dah18b]. **NumPy** [AJJF14, DOS17, Mil18, RC18, Fas18]. **NURBS** [BK19]. **NURBS-Python** [BK19]. **nutshell** [Mar03, Mar06].

### Object

[CI96, DY96a, ESM98, GL08a, HAGH18, Lut98a, Lut01, MMT09, MBLA19, USE96, AM19, BK19, GL07b, GL08c, HPH12, HHP<sup>+</sup>16, JKST22, Kak08, KCS11, Lot14a, NS22, Phi10, Phi15, SML06, She97, YFD98].

**Object-Orientation** [CI96].

### Object-Oriented

[ESM98, HAGH18, Lut01, MMT09, MBLA19, USE96, DY96a, GL08a, AM19, BK19, GL07b, GL08c, HPH12, JKST22, Kak08, Lot14a, NS22, Phi15, SML06, YFD98].

**Objective** [HGHR20, BW22, BWS23, FPN<sup>+</sup>22, KMK<sup>+</sup>21]. **Objects** [ABC97, AAB22, She97, Kak08, Phi15, WBS22].

**Objekte** [Wei06a]. **objektorientierte** [Wei06b, Wei06a, Wei09].

**objektorientierter** [The09].

**Objektorientierung** [EK08]. **objet** [Swi09].

**Observability** [Kra22]. **observables**

[Ver22a]. **observations** [Pop10]. **ObsPy**

[TLR21]. **obtain** [VMRFC23]. **obtaining**

[DBdFdSR21]. **O'Connor** [Ano13]. **Octave**

[Wet20]. **October**

[ACM97, Ano97c, CI96, USE00]. **ODE**

[Dah18c]. **OECP** [YMcF23]. **Off** [Luk23].

**Offended** [RAH<sup>+</sup>01]. **Offline** [GAS<sup>+</sup>16].

**offlibnumpy** [RDB21]. **offlibpytorch**

[RDB21]. **Ogg** [RAH<sup>+</sup>01]. **Oil** [OOM<sup>+</sup>23].

**OLR** [HKGvS21]. **OLR-Based** [HKGvS21].

**OMI** [HKGvS21]. **On-Ramp** [SYGY21].

**One** [GS12, Ngu08b, Pat16, Cha15, Ros08,

TMH<sup>+</sup>23]. **One-Dimensional** [Pat16].

**One-Hour** [Ngu08b]. **One-peak** [GS12].

**online** [JAGP14]. **only** [Cha15, KI19]. **OO**

[LAG07]. **OO-Programmierung** [LAG07].

**OOP** [She97]. **Open**

[AMB19, CX23, EML21, Eur91, HYG16,

JPOB20, JCMG11, MMP<sup>+</sup>22, MOM21,

Ray98, AG23, Bah15, BK19, BLN<sup>+</sup>21, CR22,

CV22, CFW17, CG17, CBLI22, DPH16,

FL15, FNX22, FH22, GMP<sup>+</sup>20, GNPP23,

HAC<sup>+</sup>23b, HU17, Idr14, JNN12, JNN13,

KPK<sup>+</sup>17, KSH14, MAS<sup>+</sup>22, MDRN18,

MBP<sup>+</sup>22, NZPWR22, OBWM23, PSGL21,

SV14, SSS22, TOPC23, TV13, Ull15, VSS17,

YMcF23, You08, ZRK21, ZRK22, ddSNX22,

LFN<sup>+</sup>11, LPG<sup>+</sup>23, Len15]. **Open-CV**

[Len15]. **open-ended** [YMcF23].

### Open-Source

[AMB19, CX23, HYG16, JPOB20, MMP<sup>+</sup>22,

AG23, BK19, BLN<sup>+</sup>21, CR22, CV22,

CFW17, CG17, CBLI22, DPH16, FNX22,

FH22, GNPP23, HAC<sup>+</sup>23b, HU17, JNN12,

KPK<sup>+</sup>17, KSH14, MAS<sup>+</sup>22, MDRN18,

MBP<sup>+</sup>22, NZPWR22, OBWM23, PSGL21,

TOPC23, TV13, YMcF23, ddSNX22].

**open-world** [VSS17]. **OpenCL** [Di 14].

**OpenCV** [Jos15, MH15]. **OpenFL**

[DSB<sup>+</sup>23]. **OpenFL-XAI** [DSB<sup>+</sup>23].

**OpenFOAM** [MFL<sup>+</sup>22].

**OpenMechanochem** [DyH21]. **OpenMG**

[BISC14]. **OpenMoist** [MPMC21].

**OpenSees** [ZMS18]. **OpenSeesPy**

[GYWG23, ZMS18]. **OpenSeesPyView**

[GYWG23]. **OpenStreetMap**

[Boe17, PL20]. **Operating**

[CI96, Mos20b, LYZ<sup>+</sup>22]. **Operational**

[PARS22]. **operations**

[BBHB22, SABEh20]. **operator** [RV20].

**opt\_einsum** [SG18]. **Optical**

[RDB21, AGMFGE23, BJR<sup>+</sup>20, CMS22,

MD22a, SLB<sup>+</sup>23]. **optics** [WMA<sup>+</sup>22].

**optimisation** [FPN<sup>+</sup>22, RFG13, SUM21].

**optimisation-based** [SUM21].

**Optimization** [CFMR19, CX23, EML21,

HAGH18, JG17, MMT09, Mir18, PLRG22,

RPL<sup>+</sup>23, SdSS16, Wit15, ZTT22, AES<sup>+</sup>22,

GLS<sup>+10</sup>, MFQ<sup>+21</sup>, RV20, Rie09, SLA<sup>+23</sup>, THG<sup>+23</sup>, WBK<sup>+24</sup>, Wie18]. **optimizations** [ABF13, BB17]. **Optimized** [LH20, TMH<sup>+23</sup>]. **Optimizer** [EML21]. **Optimizing** [FSZD20, RKVL14, BB22b, FLR22, HWW<sup>+15</sup>, LJ19, MD15, May17, SG18, ZLBF14]. **options** [LS98]. **OPTN** [HW19]. **optoelectronic** [VMRFC23]. **OPUS** [MSR03]. **Oracle** [Ano00c]. **ORBKIT** [HPT<sup>+16</sup>]. **orchestration** [BB22a]. **order** [AMGM20, FSMCFP23, Lot14a, MO14, PGM19, SG18]. **ordered** [LYZ<sup>+22</sup>]. **Ordering** [Ang00a]. **ordinal** [BBHB22]. **Oregon** [CLT20]. **O'Reilly** [Ano97a, Ano00a]. **Organ** [HW19]. **Orientated** [KHD<sup>+16</sup>]. **Orientation** [CI96]. **Oriented** [ESM98, HAGH18, Lut98a, Lut01, MMT09, MBLA19, USE96, AM19, BK19, CJGA23, DY96a, GL07b, GL08a, GL08c, HPH12, HHP<sup>+16</sup>, JKST22, Kak08, KCS11, Lot14a, NS22, Phi10, Phi15, Ros18, SML06, YFD98]. **OS/2** [DF00]. **Oscillation** [HKGvS21]. **oscillators** [FH22]. **osmfilter** [PL20]. **OSMnx** [Boe17]. **otebook** [VMRFC23]. **Other** [Wil00, Hos12]. **Our** [Cas20]. **out-of-plane** [FNX22]. **Outcomes** [WX18]. **outlier** [SAB<sup>+20</sup>]. **Output** [Sta21, FRdN21, SMD23]. **OutPyR** [SAB<sup>+20</sup>]. **Overdetermined** [Luk23]. **overhead** [ZXZX22]. **overview** [LS98]. **own** [Nai14, RH15, SML06]. **oxide** [BWMS22].

**P** [VMRFC23, VMRFC23]. **P2NMAP** [HK15]. **PaCAL** [KJ14]. **Pacific** [HK95, IEE97b]. **pack** [Rad08]. **Package** [AVS20, CRL21, CX23, DB17, DF21b, GPKL<sup>+20</sup>, HFB21, Hig22, HKGvS21, HMB23, IG19, KfV20, KHD<sup>+16</sup>, KJ14, LDCM23, LD19, LVH<sup>+18</sup>, ML16a, MWS18, MBLA19, MOM21, OPA<sup>+14</sup>, RDBC23, SdSS16, VEV<sup>+19</sup>, VBI<sup>+23</sup>, WL20, XMW10, XL18, YH21, AGMFGE23, ASAA20, AME<sup>+21</sup>, AYI<sup>+24</sup>, BYWW23, BFT20, Bie21, BLE21, Boe17, BE20, BHA18, BRF<sup>+23</sup>, BJR<sup>+20</sup>, CVV23, CMS22, CFSK14, CJGA23, CZ22, CG17, CKK<sup>+13</sup>, Dah18a, DFC18, DPF<sup>+21</sup>, DFSW19, EBNS22, EAMSR<sup>+23</sup>, FSMCFP23, FH22, FRdN21, FC17, Gal22, GRW<sup>+19</sup>, GKK<sup>+23</sup>, GdGB<sup>+18</sup>, Gir21, GL08b, GL09, GF18, Gra18, Hac23a, HHB<sup>+22</sup>, HAC<sup>+23b</sup>, Han18, HHVB21, HM22, HSD<sup>+22</sup>, HHM18, Hug18, JEC18, JPJ<sup>+23</sup>, KH23, KF23, KPK<sup>+17</sup>, KPKS22, Le 24, LPG<sup>+23</sup>, LHH<sup>+21</sup>, LKK23, MWK<sup>+20</sup>, MAC<sup>+21</sup>, MGFO23, MAS<sup>+22</sup>, MD22a, MTPHH18, MFQ<sup>+21</sup>, MSV23, MMG19, Mos20a]. **package** [ML18, MR18, Mur18, NMGB17, NRC23, NEGZG18, OGA<sup>+20b</sup>, OGA<sup>+20a</sup>, OC20, PF22, PFLG21, PW17, QZWU19, RG18, RHLTG<sup>+22</sup>, RNR17, RE22, RGP<sup>+22</sup>, SHFJ18, SSH16, Smi18, SG18, Spi18, Sta17, TS20, TR22, TV13, TTHZ23, TMH<sup>+23</sup>, VCF22, Var16, VM22, VC18, WZZ<sup>+23</sup>, WBS22, Wha18, WKS23, WO14, ZTC<sup>+21</sup>, ZC20, ZL23, ZRK21, ZRK22]. **Packages** [BUS21, CASA22, Mil18, ACS23, Lub14, ZMD21]. **Packt** [Wei06b]. **Padasip** [CV22]. **PageRank** [PKDM21]. **Pages** [Ang00b, Ang00c, Bie97, Ano97a, Ano00a, Liu22, Mit00]. **pairs** [AAYK23]. **palette** [TEG18]. **palette-based** [TEG18]. **Palm** [Ano00c, Ano00c]. **Panda** [Els23]. **Pandas** [Mil18, Nel15]. **paper** [Lee17, MDRN18]. **Papers** [Anoxxa, Anoxxb, Anoxxc, Anoxxd, ACM92]. **paradigm** [Kir04]. **Parallel** [BT06, CBW<sup>+21</sup>, Coe17, DLC23, Di 14, DGMP09, HFB21, HTA<sup>+97</sup>, Hin03, Hin07, IEE97a, Luk23, MAG21, MRG17, Pal14, PLRG22, RPL<sup>+23</sup>, Sah12, TBA<sup>+17</sup>, ZGV<sup>+23</sup>, BSG<sup>+16</sup>, CLM05, CGK11, GFB<sup>+14</sup>, HHB<sup>+22</sup>, HLS006, MRG18, PWF17, Yes15, Zac15, MMP11, Par22]. **Parallel-in-time** [HFB21]. **parallelisation** [RCAE<sup>+20</sup>]. **Parallelism** [BUS21, HBS<sup>+20</sup>, SLA<sup>+23</sup>]. **parallelizable**



[GG21]. **Parallelization** [AAB22, DTM<sup>+</sup>18, MAC14]. **Parallelized** [BTR14, CWM<sup>+</sup>21, DFSW19]. **Parallelizing** [CL06]. **Parameter** [EML21, LWV20]. **parameterization** [KMK<sup>+</sup>21]. **parameters** [DBdFdSR21, HHVB21, LJ19, RKVL14]. **Parametric** [LDCM23, FRdN21, KMLP<sup>+</sup>23]. **ParamGULP** [DBdFdSR21]. **Parapint** [RPL<sup>+</sup>23]. **ParaView** [SMD23]. **Parglare** [Dej22]. **Parquet** [KI19]. **parser** [Dej22]. **ParShift** [FSMCFP23]. **parsing** [Spi18]. **Parsl** [CBW<sup>+</sup>21]. **Part** [Ang00b, Bri12a, Bri12b, Ang00c, FNX22, ddSNX22]. **Partial** [BT06, GWW09, LT03, MSL<sup>+</sup>07, MD15]. **Partially** [Har15, MR22]. **Particle** [Hug14, ML16a, Mir18, Nor17, RBP<sup>+</sup>21, WBR<sup>+</sup>22, May21, RKVL14]. **Particle-Based** [Nor17]. **particle-in-cell** [RKVL14]. **PARyOpt** [PLRG22]. **Passages** [Gro20]. **passing** [BL97a]. **Passive** [HK15, JM20]. **Password** [GAS<sup>+</sup>16]. **PASTA** [KBLJ18]. **path** [AZLY18, BSS16, CMM14]. **path-based** [AZLY18]. **Pathology** [MBA<sup>+</sup>22]. **Pattern** [CJYH23, KB18, KF23]. **Pattern-based** [CJYH23]. **Patterns** [VCR17, Chr02, HZ23, Kas15, YHX22]. **PBTK** [EML21]. **PC** [Wal07, Ano00c]. **PCA** [ZAPS20]. **PCA-derived** [ZAPS20]. **PCAFold** [ZAPS20]. **PDE** [CL06]. **PDF** [DF00]. **PDF-Dateien** [DF00]. **peak** [GS12]. **Penetration** [ABCC22, Duf15, Buc15, Moh15, O'C13]. **pentesters** [Sei14]. **Penultimate** [RAH<sup>+</sup>01]. **People** [Lip22, Piñ24]. **peptide** [WBS21]. **perceptions** [SL08]. **Perfect** [Hig22]. **Perfectly** [Sch17]. **Performance** [BKRT21, CBST24, DPSD08, Dog15, EPF<sup>+</sup>23, FSZD20, IEE20, KWBB22, LH20, LLL<sup>+</sup>20, LD07, MSP<sup>+</sup>22, MBLA19, SRS<sup>+</sup>23, SdSS16, TS14, ZXX23, BCRS15, BSS16, BS19, BCC<sup>+</sup>18, BBC<sup>+</sup>24, CLM05, CZ22, CFÁA<sup>+</sup>20, DLC23, GVLD<sup>+</sup>23, GO14, HF06, IOC<sup>+</sup>12, Lan13, Lew09, LJ19, Mar18, ML16b, Par22, Ros13, Ros14, SNB<sup>+</sup>19, SSH08]. **performing** [BSS16, VCF22]. **periodic** [HAC<sup>+</sup>23b]. **Perl** [DF00, SKS08, Bla02, Bla04, HAE00, HF06, Kak08, LS97, MSR03, Ngu08d, Ngu08e, Pre03, Roo97, Sit02, SM04, Stu07]. **permittivity** [YMcF23]. **Perprof** [SdSS16]. **Perprof-py** [SdSS16]. **Persistence** [Ano01b]. **Perspective** [Eur91, KDC<sup>+</sup>18, GRW<sup>+</sup>19, Wep15]. **perturbation** [DB22, Gal22]. **Perusing** [Wil97b]. **Petascale** [Wit21]. **Pfaffian** [Wim12]. **pgm** [WZZ<sup>+</sup>23]. **pGrAdd** [WV22]. **phantoms** [CG17]. **Pharo** [ADP21]. **phase** [AYI<sup>+</sup>24, CM20, DCOC<sup>+</sup>19, TQGE23, WRBT21]. **phase-specific** [WRBT21]. **Phasepy** [CM20]. **phenology** [Tay18]. **Phil** [Ano00b]. **Philip** [Lee17]. **phonon** [WZZ<sup>+</sup>23]. **photoemission** [BYL<sup>+</sup>21, SL20]. **Photophysiology** [RKR21]. **PHP** [SKS08, HF06, HS12, Ott18, SM04, Stu07, TTS<sup>+</sup>10]. **phrasebook** [Day07b]. **Phylogemetric** [Gre16]. **phylogenetic** [Gre16]. **phyphy** [Spi18]. **Physical** [Ano21, Lee17, Tie16, Ish19, KN15, RKVL14, WAN<sup>+</sup>22]. **Physics** [Aya14, Bäck07, Gez20, Gez23, MAFM21, MMP<sup>+</sup>22, BLN<sup>+</sup>21, Bor07, Di 13, EBNS22, MCGK19, RGS<sup>+</sup>21, RSPJ21, San13, SSD<sup>+</sup>22, Wep15, YMA23, BB13]. **Phytoplankton** [RKR21]. **PI** [CMM14, AG23, BW14, Cox14, Don14, MAFM21, Nix15]. **Piano** [TS14]. **pickle** [Fas18]. **pICNIK** [RHLTG<sup>+</sup>22]. **Pierro** [Wep15]. **PII** [DPF<sup>+</sup>21]. **Pipeline** [MSR03]. **pipelines** [WAK22]. **pitfalls** [CEI<sup>+</sup>12]. **PIV** [NT24]. **plan** [Lot15b]. **planar** [ZL20]. **plane** [FNX22, ddSNX22]. **Planes** [RDBC23]. **planetary** [LRPD18]. **planner** [Boe23]. **planning** [LFT21]. **planning-level** [LFT21]. **plant** [PBN<sup>+</sup>09, Tay18]. **PlantGL** [PBN<sup>+</sup>09]. **plasma** [BYWW23, SSD<sup>+</sup>22].

**Platform**

[Ano00c, BBB02, Fun23, Lac06, SBC<sup>+</sup>17, TT21, BLN<sup>+</sup>21, HPT<sup>+</sup>16, MDRN18, PSGL21, ST<sup>+</sup>07, She97, Ull15, Lac06].

**platform-independent** [She97]. **Platforms** [HA20, GFB<sup>+</sup>14, Par11]. **Playdoh** [RFG13].

**Playing** [Swe09]. **PLEASE** [GDP18]. **plots** [Tos09]. **Plotting**

[OZW18, Han18, HFF<sup>+</sup>17, JM20, Le 24].

**Plug** [DF00]. **Plug-ins** [DF00]. **Plus**

[BUS21]. **PLW** [LD07]. **PmlBeta** [WBS21].

**pMuTT** [LWV20]. **Pocket** [Lut98b, Lut02,

Lob19, Lut05, Lut14, Stu03, Stu07]. **POGIL**

[HS13]. **point** [AM21, BMZ<sup>+</sup>18, BII<sup>+</sup>20,

DMC<sup>+</sup>15, FH22, JT14, SNNB17]. **Poisson**

[Bra13, GNPP23]. **polarizers** [MFQ<sup>+</sup>21].

**policies** [SFC23]. **Policy** [Liu22]. **Political**

[Dör08]. **pollution** [RC18]. **polycrystals**

[GTC21]. **Polyhedral** [LP19]. **polymers**

[ECS23]. **Polymorphie** [Wei06a].

**polymorphism** [ÅW16]. **Polynomial**

[SST23, VY15, Wit15]. **Polynomial-Based**

[SST23]. **pools** [PWF17]. **popular** [Idr14].

**portability** [GVLD<sup>+</sup>23]. **Portable**

[Di 14, Kor11, Bah15]. **Portland** [CLT20].

**ports** [Buc14]. **posets** [GS12]. **positive**

[GS12]. **Post** [AM21, SJL18, GYWG23].

**Post-processing**

[AM21, GYWG23, HTH<sup>+</sup>20].

**Post-treatment** [SJL18]. **Posterior**

[FV18, Han18]. **postprocessing** [HPT<sup>+</sup>16].

**posture** [GCBDDBF23]. **potential**

[ABS20, Cox14, DBdFdSR21, Hia15].

**potentials** [Kar23]. **Power**

[BHS18, Day14, MOM21, BSS16, DRFB<sup>+</sup>23,

Gal14, Hug18, Lay15, MH15, Mur18, Phi15,

SW14, SUM21, Tel06]. **powerbox** [Mur18].

**powered** [RDS07]. **powerful**

[Els23, Idr14, Law15, Lot14a, Zac15]. **pp**

[Hor22, Lee17, Lip21, Lip22, Sa<sup>'</sup>23, Sau23].

**Practical** [Ben08, Cuel3, Gal14, Het02,

Joh15, Mat16, CR15, DAJ<sup>+</sup>15, Fla08, Ish17,

ICVG14, Per14b, Swe14]. **Practice** [TS14].

**practices** [ZKB<sup>+</sup>08]. **practitioner** [BM15].

**pragmatic** [RH15]. **Pragmatics** [Sco09].

**praktisch** [Wei06a]. **practical** [Sar14].

**Praxis** [EK08]. **Praxisbuch** [Haj08]. **pre**

[HTH<sup>+</sup>20]. **pre/post** [HTH<sup>+</sup>20].

**pre/post-processing** [HTH<sup>+</sup>20]. **Precise**

[YHA<sup>+</sup>16]. **Precision** [GPKL<sup>+</sup>20, Kor11,

LV20, BJR<sup>+</sup>20, BII<sup>+</sup>20, JT14].

**Preconditioning** [CJ22]. **predicting**

[AZLY18, Zie19b]. **Prediction**

[HBA<sup>+</sup>20, BWMS22]. **predictions** [ECS23].

**predictive**

[Bow15, Lay15, Mil14, Mil15, RO15a].

**preferences** [DMC<sup>+</sup>15]. **PREMER**

[VBB18]. **preparation** [EPM09].

**Preparing** [TLR21]. **Preprocess**

[GPKL<sup>+</sup>20]. **Preprocessing** [CRL21,

ASAA20, HHB<sup>+</sup>22, LRL23, MBA<sup>+</sup>22, PF22].

**presentation** [Kak08]. **presented** [ACM92].

**Preserving** [IG19]. **Press** [Ano15a, Ano15b,

Clal5, Gve09, Hor22, Lip22, Liu22]. **Presses**

[Ray98]. **Price** [Lee17]. **Prime** [Ano98d].

**primer** [Lan09, Lan11, Lan12]. **Princeton**

[Lee17]. **principles** [AM21, LHB14]. **print**

[Ano14]. **priority** [BBHB22]. **prisms**

[LDAL20]. **Pro** [Alc09, BA14, Sil14].

**probabalistic** [Kar14]. **Probabilistic**

[LP19, RBV16, DB22]. **Probabilities**

[Pat16]. **probe** [YMcF23]. **Problem**

[Bar21, Mis19, PBB22]. **Problem-Solving**

[Bar21]. **Problems** [AVS20, Ble20, DB17,

LeV09, ŠBA<sup>+</sup>15, Wit15, ZTT22, Kar14,

SKS23, She15b, TOPC23, Wil05]. **ProbLog**

[FLR22]. **ProbLog-based** [FLR22].

**procedure** [HF06]. **Proceedings**

[ACM92, ACM97, Ano97c, Ano97d, CI96,

ESM98, Eur91, HTA<sup>+</sup>97, IEE97b, IEE97a,

IEE20, USE96, USE00, CLT20]. **Process**

[Fun23, OOM<sup>+</sup>23, RE22, Ros18, Wes15].

**process-oriented** [Ros18]. **processes**

[SSS22, SAA18]. **Processing** [APS10,

AMB19, BKL09, Ble20, FLS<sup>+</sup>20, GRKN<sup>+</sup>19,

HTA<sup>+</sup>97, Hug14, IEE97a, KHD<sup>+</sup>16,

MLGW18, Mil18, RM19, RKR21, SBC<sup>+</sup>17,

SH19a, AM21, BST<sup>+</sup>17, GYWG23, HTH<sup>+</sup>20,

How98, McG00, Mer03, MMG19, Myr15, Per14b, PWF17, SGPHD<sup>+</sup>17, She15b]. **processor** [Tab10]. **Procrustes** [MRT<sup>+</sup>22]. **Procurement** [HW19]. **Produced** [GPKL<sup>+</sup>20]. **product** [SH17]. **production** [AZH<sup>+</sup>24, ZTC<sup>+</sup>21]. **Productive** [CBW<sup>+</sup>21]. **Productivity** [Ano01b, BUS21, Moo21]. **Products** [Ano00c, Ano01b, MAS<sup>+</sup>22]. **Professional** [MS<sup>+</sup>00, MBW07, Het05, Het08, McG07a]. **professionellen** [DF00]. **Profi** [Haj08]. **Profi-Leitfaden** [Haj08]. **Profile** [Ano19, FhDAF09, SdSS16, Ott18]. **Profile-guided** [FhDAF09, Ott18]. **profiles** [LPG<sup>+</sup>23]. **Profiling** [CYKG23, SLA<sup>+</sup>23]. **Program** [DDLW02, AZLY18, BYL<sup>+</sup>21, BII<sup>+</sup>20, DEMM19, DCOC<sup>+</sup>19, HS13, Len15, MCF<sup>+</sup>22, MTS<sup>+</sup>18, NL23, SLP<sup>+</sup>22, Swe09, DBdFdSR21]. **Programmable** [OA17]. **Programmefänger** [The09]. **Programmation** [Zia06, Bai08, Swi09]. **Programmbeispiele** [Lin06b]. **Programmer** [Ang99, Ano00b, McG98c, Wil97b, Wil00, Wil01, Wil02, Swi09]. **Programmering** [Lin06a]. **Programmers** [HR00, Ros08, Sma12, Cox14, Meh15]. **Programmierer** [Haj08]. **Programmierung** [EK08, LAG07, The09, Wei06a, Wei06b, Wei09]. **Programming** [ACM92, Ano95, Ano97b, Ano00b, Bal18, CL06, CG23, CBW<sup>+</sup>21, DY96b, DY99, Ful96, Gar98, Gra00, Gut13, Gut16, HR00, HC16, Hin02, HWJ<sup>+</sup>21, HMD<sup>+</sup>96, Joh97, KLM14, KLM15, LT03, Lut96, Lut01, Lut06, MAG21, McG98b, McK16, MSS<sup>+</sup>19, Nag17, Orb18, Pet02, Pre00, RG00, Roo98, San15, SDS00, Sco09, Seg07, SNNB17, SS13, Sum09, Sum10, Tro96a, WX18, Wit15, Ano00a, BCRS15, BSS16, BS19, BKMY03, BKMY04, Bro06, CLM05, Can14, Cas20, Chr02, Chu01, Chu07c, CKC23, Daw03, Daw06, Daw10, DAJ<sup>+</sup>15, DLC23, Don14, DV21, Els23, FL06, FMPS17, Fla08, Gal14, GS12, GVLD<sup>+</sup>23, GL07a, GL07b, GL08a, GYWG23, Gut04, Har07, HF06, Har12, Hia15, Hig03, Hil15a, Hil20, HLS006, HPH12, Joh12, Kin05, Lak17, Lam15, Lan13, Lan09, Lan11]. **programming** [Lan12, Law15, Lee11, LHB14, LFT09, LL08, Lob19, Lot14a, Lot15a, MS<sup>+</sup>00, Mau02, McG98a, MRG18, MR07, MR09, MBW07, MSW08, Mue14, Nel15, Och09, Pal14, Phi10, Phi15, Ram15, RG10, RG14, RH15, Ros13, Sah12, Sah15, Sal18, SL08, SV14, Sar14, SW15, SWD15, Sei09, Sei14, She15b, SB15, Sum08, Swe13, Swe14, TSC02, ÜK12, WvA96, Wep15, WO14, Yaa23, Zac15, ZKB<sup>+</sup>08, Bax01, Ano97a]. **programming-based** [GYWG23]. **Programs** [Di 14, JCY<sup>+</sup>19, ÅW16, AAYK23, BSS16, Lan13, Nag06]. **progress** [Sie17]. **project** [BB13, Cha15, Pop10, You08]. **Projects** [CCM<sup>+</sup>23, KCVM22, VCR17, Arb14, Bal12, Ben08, SW14, Sal18, WPH<sup>+</sup>22]. **Projekte** [Ric14]. **propagate** [SLP<sup>+</sup>22]. **propagation** [MR22, MD22a]. **Properties** [AGR24, AZLY18, CM20, DCRF23, SP23, SLDF<sup>+</sup>21, TR22, VMRFC23, WV22]. **proposals** [SSS22]. **Protein** [SN12, KRH18a, KRH18b, MMEH08]. **proteins** [MMEH08]. **prototype** [Len15]. **prototypes** [DAJ<sup>+</sup>15, YPB16]. **Prototyping** [BKC14, KBC<sup>+</sup>20, Spe19, UVa95, CBLI22, KRSD<sup>+</sup>23, RCRS06, ST<sup>+</sup>07, vd91]. **Provably** [LJ23]. **provenance** [PMBF17, SGZ23]. **provided** [Pip15]. **Providing** [Ras18]. **ProxySource** [Ano01b]. **pruned** [BB22b]. **psrqpy** [Pit18]. **Pteros** [Yes15]. **PTRAIL** [HHB<sup>+</sup>22]. **public** [SLP<sup>+</sup>22]. **publication** [BRF<sup>+</sup>23, JAGP14, Tos09]. **publications** [RRRGVD19]. **Publishable** [SJL18]. **published** [Gve09]. **Pudipeddi** [Myr15]. **pulsar** [Pit18]. **pulse** [MD22b, MD22a]. **pure** [SSD<sup>+</sup>22]. **pure-Python** [SSD<sup>+</sup>22]. **Purpose** [AJYH18, LS16, DCRF23,

OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, TV13]. **put** [Cas20].  
**puts** [Ang99]. **pvlib** [HHM18]. **py**  
 [BFT20, PP23, BYWW23, FLS<sup>+</sup>20, FPN<sup>+</sup>22,  
 HC16, BGHC23, LR23, MD22a, SdSS16].  
**Py-ART** [FLS<sup>+</sup>20, HC16]. **Py-EFIT**  
 [BYWW23]. **py-fmas** [MD22a]. **py-irt**  
 [LR23]. **PY-Nodes** [PP23]. **PY-SUMMA**  
 [AVS20]. **Py2neo** [Gup15]. **PyACTS**  
 [DGMP09]. **PyAlbany** [LPH23].  
**PyARPES** [SL20]. **PYATB** [JPJ<sup>+</sup>23].  
**PyBaMM** [SMT<sup>+</sup>21]. **PyBanshee**  
 [KMLP<sup>+</sup>23]. **pyBaram** [Par22]. **PyBEST**  
 [BLN<sup>+</sup>21, BBC<sup>+</sup>24]. **pybliometrics** [RK19].  
**PyblioNet** [Mül23]. **picalphad** [OL17].  
**PYCASO** [CWC<sup>+</sup>23]. **PyCDFT**  
 [MWK<sup>+</sup>20]. **PyCDT** [BMZ<sup>+</sup>18].  
**PyCharge** [FH22]. **PyCiGen** [GTC21].  
**pycity\_scheduling** [SUM21]. **Pycket**  
 [BBH<sup>+</sup>15]. **pyCLAMs** [ZWCQ22]. **PyCM**  
 [HJHZ18]. **PyCOMPSs**  
 [BCE<sup>+</sup>22, TBA<sup>+</sup>17]. **PyCSP** [Gal22].  
**Pycuda** [RDBC23]. **PyDDA** [JCL<sup>+</sup>20].  
**PyDDRBG** [AES<sup>+</sup>22]. **PyDEC** [BH12].  
**PyDEF** [S JL18]. **pydiffusion** [CZZ19].  
**PyDII** [DMC<sup>+</sup>15]. **PyDMD** [DTR18].  
**pyDSM** [ECS23]. **PyDTNN** [BCM21].  
**PyECOM** [GPEM23]. **pyEIA** [VCLS21].  
**pyEIT** [LYX<sup>+</sup>18]. **pyerrors** [JKKN23].  
**PyExaFMM** [KWBB22]. **PyF95** [LC11].  
**pyfao56** [BTDT23, Tho22, TBD23].  
**PyfastSPM** [BRF<sup>+</sup>23]. **pyFDM** [WKS22].  
**pyFFS** [BKH<sup>+</sup>22]. **pyFIRI**  
 [ZRK21, ZRK22]. **pyfMRIqc** [WL20].  
**PyFocus** [CMS22]. **PyFR** [Wit21]. **PyFrac**  
 [ZL20]. **PyFWI** [MGFO23]. **Pyg4ometry**  
 [WAN<sup>+</sup>22]. **pygal** [Ada14]. **Pygame**  
 [KM15, McG07a]. **PyGBe**  
 [CFCB17, CCFB16]. **PyGBe-LSPR**  
 [CFCB17]. **pyGDM** [WMA<sup>+</sup>22, Wie18].  
**pyGFC** [Ngu08c]. **pyGLLE** [MD21].  
**pyGlobus** [Jac02]. **pyGNMF** [LB22].  
**Pygpc** [WPM<sup>+</sup>20]. **pyGPGO** [JG17].  
**PyGran** [AM19]. **pygrank** [KPKS22].  
**PyGTED** [BSSz<sup>+</sup>20]. **PyGtk** [CK00].  
**pyhector** [WHG17]. **pyHomogeneity**  
 [HMB23]. **pyIAST** [SSH16]. **PyIFDM**  
 [WKS23]. **PyIVNS** [SABEh20]. **pyJac**  
 [NCS17]. **pyJacqQ** [JWHS16]. **Pykat**  
 [BJR<sup>+</sup>20]. **PyLCP** [EBNS22]. **PyLESA**  
 [LFT21]. **PyLighter** [BC09]. **PyLlama**  
 [BVV22]. **PyLog** [HWJ<sup>+</sup>21]. **Pylons**  
 [Gar09]. **PyLops** [RV20]. **Pymagicc**  
 [GWM18]. **PyMatching** [Hig22].  
**PyMaxEnt** [SR19]. **PyMC** [PHF10].  
**pyMCD** [LKK23]. **pymcdm** [SKS23].  
**pyMDO** [MMT09]. **PyMGRIT** [HFB21].  
**PyMikor** [Bar22]. **PyMIP** [AW06].  
**pymodconn** [CJGA23]. **PyModPDE**  
 [KSS20]. **PyMOL** [Moo21, WBS21].  
**Pymrio** [Sta21]. **PyMTL3** [JPOB20].  
**pyneqsys** [Dah18b]. **pynucastro** [WZ18].  
**PyNumero** [RPL<sup>+</sup>23]. **pyodesys** [Dah18c].  
**PyOECP** [YMcF23]. **PyOMA** [PARS22].  
**PyOMA\_GUI** [PARS22]. **PyOMP**  
 [MAG21]. **PyOPAsolver** [BBHB22].  
**PyOpenCL** [MR22]. **PyOphidia**  
 [EPF<sup>+</sup>23]. **py parsing** [McG07b].  
**pyParticleEst** [Nor17]. **pyparty** [Hug14].  
**PyPathway** [XL18]. **Pyper** [XMW10].  
**pyPhenology** [Tay18]. **PyPhotonics**  
 [TR22]. **PyProcar** [HTH<sup>+</sup>20, LTT<sup>+</sup>24].  
**PyPSA** [BHS18]. **PyPy** [ABF13, LJ19].  
**PyQBench** [JLP23]. **PyQT**  
 [Har12, Rem01a, Sum08]. **PyQUBO**  
 [ZTT22]. **PyR** [LS17, SS21]. **PyRad**  
 [AME<sup>+</sup>21, FLS<sup>+</sup>20]. **PyRDM** [JAGP14].  
**pyrepo** [WBS22]. **pyrepo-mcda** [WBS22].  
**Pyret** [NMGB17]. **PyRETIS** [LRvE17].  
**Pyrgg** [Hag17]. **Pyro** [BKMY03, BKMY04].  
**pyROM** [PGM19]. **PySCF** [HAC<sup>+</sup>23b].  
**pySDC** [Spe19]. **pySDC-Prototyping**  
 [Spe19]. **pySecDec**  
 [BHJ<sup>+</sup>18, HJJ<sup>+</sup>22, HJK<sup>+</sup>24]. **pysimm**  
 [DFC18, DPF<sup>+</sup>21, FC17]. **PySPH**  
 [RBP<sup>+</sup>21]. **PySpike** [MK16]. **PySPLIT**  
 [War18]. **pysrim** [OZW18]. **PySSM**  
 [SBMD14]. **PySTPrism** [LDAL20].  
**PyStructureFactor** [SZNW23].

**pySuStaIn** [AWO<sup>+</sup>21]. **PySwarms** [Mir18]. **PySy** [WO14]. **pyTDGL** [Hor23]. **pyTEP** [RE22]. **PyTES** [XGW23]. **pythermalcomfort** [TS20]. **Python** [Ano97c, Ano00b, Ano02, AJH<sup>+</sup>12, BBB02, Bax01, BK19, CR15, DFC18, DPF<sup>+</sup>21, DF00, EK08, Haj08, Hil20, Hug01, Ish17, Ish19, Jan10, Joh15, Lac06, Laz22, Lee17, Lin06b, LAG07, MDR<sup>+</sup>22, Mat16, Mil18, Mue14, Orb18, Ram18b, RAH<sup>+</sup>01, Ric14, Sar14, SML06, Ste14, SKS08, Swi09, The09, Wei06a, Wei09, Wep15, BKMY04, Swe14, ddSNX22, ÅW16, AZH<sup>+</sup>24, Ada14, ACZ<sup>+</sup>22, AGMFGE23, ASAA20, AES<sup>+</sup>22, AVS20, AWO<sup>+</sup>21, ABGD<sup>+</sup>20, ABS20, ACS23, AAYK23, APS10, AW06, Ang99, Ang00b, Ang00c, Ano95, Ano97b, Ano98a, Ano98b, Ano98c, Ano98e, Ano00c, Ano01b, Ano12, Ano18, Ano19, Ano20, Anoxxa, Anoxxb, Anoxxc, Anoxxd, Ant15, AYI<sup>+</sup>24, ADP21, Arb14, AG23, AFL23, ABC97, AM21, AAB22, AMB19, Aya14, Bâc07, BW22, BWS23, BB22a, Bah15]. **Python** [Bai08, BYWW23, Bar21, BKRT21, BDF<sup>+</sup>20, BP17, Bar11, BUS21, Bas08, Bas10, BG17, Bau96, BSG<sup>+</sup>16, BLP<sup>+</sup>21, BVV22, BL97a, Bea00, Bea01, Bea06, Bea09b, Bea09a, Bea12, BJ14a, BJ14b, BHF16, BBHB22, BS21, BJM23, BISC14, BKH<sup>+</sup>22, BB13, Bie21, Bie97, BVB<sup>+</sup>07, BST<sup>+</sup>17, BK19, BKL09, Bis01, BLE21, BGHC23, Bla02, Bla04, BKMY03, BMK03, BWMS22, Boe17, BE20, BT21, Boe23, BLN<sup>+</sup>21, Bor07, BSSz<sup>+</sup>20, BM15, BHA18, Bow15, BW14, BB22b, BYL<sup>+</sup>21, Bra13, BTDT23, BFM18, BRF<sup>+</sup>23, BDQ<sup>+</sup>22, Bri12a, Bri12b, BMZ<sup>+</sup>18, BCG05, Bro00, BM18, BHS18, BJR<sup>+</sup>20, Bro06, BA14, BLS<sup>+</sup>23, Bru09, Buc15, Buc14, CGHGRB21, CLM05, CL06, ÇA23, CZA<sup>+</sup>23, Can14, CCM<sup>+</sup>23, CVV23, CMS22, CR22, CWC<sup>+</sup>23, Cas17, Cas20, CG23, CFPS23, CBST24, CSZ<sup>+</sup>19, CV22, CMM14, CRL21, Cha15]. **Python** [CV15, CFSK14, CM20, CYKG23, CJGA23, CZZ19, CZ22, CJYH23, CX23, CHM24, CFW17, CBLI22, CS09, Chr02, CSRV13, Chu01, Chu02a, Chu02b, Chu07b, Chu07a, Chu07c, Chu08, CKK<sup>+</sup>13, CFÁA<sup>+</sup>20, CFCB17, Coe17, CH17, CLMM20, CHG<sup>+</sup>16, CR12, Con95, CBB14, CCFB16, CC20, Cot03, CWM<sup>+</sup>21, CWLG<sup>+</sup>21, Cox14, Cri18, CKC23, Dah18a, Dah18c, DPS05, DPSD08, Dal07, Dan18a, DCRF23, DSB<sup>+</sup>23, Dar12, Dav21, Daw03, Daw06, Daw10, Day14, Day07b, Day07a, DyH21, DMD<sup>+</sup>21, DEMM19, Dec04, DM20, DDLW02, Dej22, DTR18, DAJ<sup>+</sup>15, DLC23, Di 13, Di 14, DB17, DMC<sup>+</sup>15, DD15, Dog15, DDMS14, Don09, Don14, DRFB<sup>+</sup>23, Dör08, Dou98, DFSW19, Dow09, Dow15, DGMP09, DY96a, DHH96, DY96b, DY99, Dub07, Duf15, DF21b, DV21, DBdFdSR21, EBNS22, EML21, ESM24, EPF<sup>+</sup>23, Els23, EPM09, EK08, EK09, Ern99]. **Python** [EAMSR<sup>+</sup>23, Est01, ECS23, EVV12, Far02, Fas18, Feh02, FSMCFP23, FMPS17, FKA<sup>+</sup>17, FNX22, FH22, FRdN21, Fla08, FV18, FBC09, FM16, FPN<sup>+</sup>22, FC17, FLR22, FPSZ21, Ful96, Fun23, Gad09, GMKRS21, GH18, GHN19, Gal14, Gal22, Gar98, Gar09, GS12, GRW<sup>+</sup>19, Gez20, Gez23, GKK<sup>+</sup>23, GWM18, GJ08, GdGB<sup>+</sup>18, Gir21, GP22, GQCP<sup>+</sup>18, GVLd<sup>+</sup>23, GHT06, GHT08, GZT<sup>+</sup>18, GL07b, GL08a, GL08b, GL08c, GPem23, GFB<sup>+</sup>14, GCBDDBF23, GPKL<sup>+</sup>20, GNPP23, GO14, GHKW22, GPP<sup>+</sup>21, Gov15, GF18, GDP18, GEH19, Gra18, Gra00, Gre18, Gre07, Gre16, GRKN<sup>+</sup>19, Gue18, GG21, Gun14, GYWG23, Gup15, Gut04, Gut13, Gut16, GWW09, Hac23a, HBS<sup>+</sup>20, HGHR20, HS22, Hag17, HJHZ18, HFB21, HHB<sup>+</sup>22, Ham98, HR00, Han18, HAE00, Har15, HF06, HR20, HW19]. **Python** [Har12, Has16, HJPB17, HHVB21, HM22, HSD<sup>+</sup>22, HC16, HTH<sup>+</sup>20, Her14, HU17, HPT<sup>+</sup>16, HOB23, HBA<sup>+</sup>20, Het02, Het05, Het08, Het10, Het14, HFF<sup>+</sup>17, Hia15, Hig22, Hig03, Hil15a, Hil15b, Hin02, Hin03, HLSØ06, Hin07, HHJCRB21, HKGvS21,

HQF<sup>+</sup>20, HAB<sup>+</sup>20, HRS06, HB16, Hor23, Hos12, Hos14, HK15, How06, How98, HH17, HZ23, HWJ<sup>+</sup>21, Huc18, Hug99, Hug14, HLR15, Hug18, Hug97, HMB23, HHP<sup>+</sup>16, Idr14, IHT23, ICVG14, ISMA18, Jac02, JAGP14, JLP23, JEC18, JKST22, JPOB20, JG17, JPJ<sup>+</sup>23, JWHS16, JNN12, JNN13, JT14, Joh08, Joh12, JM20, JD02, Jos15, JKKN23, KWBB22, KfV20, Kak08, Kar23, KSS20, KS21, Kar14, Kas15, KH23, KJ15, KCVM22, KF23, KG23, KRSD<sup>+</sup>23, Kin05, KN15, Kin09, KM15, KPK<sup>+</sup>17, Kiu10, Kiu13, Kla99, Kla11, KVSC21, Kno08, KSH14].

**Python**  
 [KMLP<sup>+</sup>23, KHD<sup>+</sup>16, KBC<sup>+</sup>20, KJ14, KXK<sup>+</sup>23, KPKS22, KB07, KB18, KMK<sup>+</sup>21, Kuc97, Kuc98b, Kuc98c, KD99, KBLJ18, Lac06, LS97, LR23, LFN<sup>+</sup>11, Lam15, Lan13, LM03, Lan06, Lan07, Lan08, Lan09, Lan11, Lan12, LRPD18, Law15, Lay15, Le 24, LeV09, LPG<sup>+</sup>23, Lee11, LD19, LHH<sup>+</sup>21, LKK23, LB22, Len15, LRvE17, Lew09, LVH<sup>+</sup>18, LN23, LHB14, LPH23, Lin06a, Lin06b, LL08, LYX<sup>+</sup>18, LYZ<sup>+</sup>22, LFYX23, LHM14, LWH12, LR14, Lot14a, Lot14b, Lot15a, Lot15b, Lub14, LKF23, Lun01, LH20, LDW<sup>+</sup>21, LD07, Lut96, Lut98a, Lut98b, LA99, Lut99, Lut01, Lut02, LA04, Lut05, Lut06, Lut08, Lut09a, Lut09b, Lut13, Lut14, LFT21, LWV20, LS17, MWK<sup>+</sup>20, MZL<sup>+</sup>23, Mac92b, MAC<sup>+</sup>21, Mad15, MB17, MD17, MP19a, MP19b, MS15, MSP<sup>+</sup>22, MAFM21, MMP<sup>+</sup>22, MBA<sup>+</sup>22, MSL<sup>+</sup>07, MGFO23, Mar17, Mar18]. **Python**  
 [MLB22, Mar02, Mar03, MMA05, Mar06, MRA06, Mar07, Mar21, MCGK19, MM06, MAG21, MFL<sup>+</sup>22, May17, MAS<sup>+</sup>22, MTS<sup>+</sup>18, McF16, McG98b, McG98c, McG98a, McG00, McG07a, McK12, Meh15, MMEH08, MD21, MD22b, MD22a, MPMC21, MTPHH18, MFQ<sup>+</sup>21, MRT<sup>+</sup>22, MSV23, Mer03, MSP<sup>+</sup>17, MMG19, MMP11, MSR03, MR07, MR09, Mil14, Mil15, MB07, MA11, MH15, Mir18, MWS18, Mit15, MBA19, MBLA19, Moh15, MOM21, MBW07, Mor17, ML16b, Mos20a, MSW08, MSS<sup>+</sup>19, ML18, MK16, MAC14, Mül13, MR18, Mur18, MS07, MGS07, NS22, NMGB17, Nag06, NT24, Nel15, Ngu08d, Ngu08a, Ngu08b, Ngu08c, Ngu08e, NM22, Nil07b, Nil07a, NRC23, NL23, Nix15, NO23, Nor17, NZPWR22, NEGZG18, O'C13, Oli07, OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, Orl97, OMGDG14, OE21, OC20, Osa17, OL17, OBWM23, OPA<sup>+</sup>14, Pal14]. **Python** [DDT20, PP23, PM23, Par22, Par11, PARS22, Pat16, PHF10, Pay11, PKDM21, Per14a, PGH11, Per14b, Pet02, PF22, Phi10, Phi15, PFLG21, Pil04, Pil09, PMBF17, Piñ24, PDS<sup>+</sup>22, Pip15, Pit18, Ple02, Plo97, PL20, PRH17, PMM<sup>+</sup>13, PHH<sup>+</sup>12, Pop10, PBN<sup>+</sup>09, PSGL21, Pre03, PW17, PWFM17, Pul00, QZWU19, RS17, Rad06, Rad08, RKVL14, RMM23, Ram18a, RBP<sup>+</sup>21, Ram15, RG18, RHLTG<sup>+</sup>22, RDS07, RCAE<sup>+</sup>20, RCT23, RG00, RNR17, RMZG06, RO15a, Ras18, Ras20, RV20, RDB21, RO15b, Ree04, RZ09, RE22, Rem01a, Rem01b, Ren23, RG10, RG14, Ric15, RGS<sup>+</sup>21, Roa23, RSPJ21, RGP<sup>+</sup>22, RH15, Rom14, Roo97, Ros18, RK19, Ros13, RFG13, Ros14, RC18, RKR21, SR19, SW14, SLP<sup>+</sup>22, Sah12, Sah15, SSH08, Sal14, San13, SL08, San15, SV14, SW15, Sav23]. **Python** [ST<sup>+</sup>07, Sch21, Sch17, SMF<sup>+</sup>23, SAD22, SL21, SUM21, Sco17, SWD15, SHFJ18, Sei09, Sei14, SDP<sup>+</sup>20, SBC<sup>+</sup>17, Sev13, Sev15a, Sev15b, SLB<sup>+</sup>23, SGPHD<sup>+</sup>17, Sha24, Sha03, SSS22, She15a, She97, SMD23, Shi07, SP23, Sil14, SAA18, SSD<sup>+</sup>22, SSH16, SLDF<sup>+</sup>21, SZW<sup>+</sup>22, SLGB14, SHTE23, SdSS16, Sit02, Sla15, SABEH20, Sma12, Smi17, Smi18, SG18, SMM<sup>+</sup>22, SZNW23, SFC23, SK19, Spi18, Spo12, Sta17, Sta21, Sta19, Ste06, SB15, SBMD14, SM04, Stu07, Suc13, SH17, SMT<sup>+</sup>21, Sum08, Sum09, Sum10, SGZ23, Suz97, SH19b, Swe09, Swe13, SLA<sup>+</sup>23, Tab10, Tan01, TFAL21, Tan06, TS20, Tau16, TR22, Tay18, TBA<sup>+</sup>17, Tel06,

TCE21, THG<sup>+</sup>23, TOPC23, TSC02, Tho22, TBD23, TF23, Thu22, Tie16, TGEA09, Tom15, TQGE23, Tos09, TTHZ23, TMH<sup>+</sup>23, Tro96c, Tro96a, Tro96b, Tro97, TSG<sup>+</sup>23].

**Python**  
 [TBJ18, ÜK12, Ull15, Vai09, Vai14, VCF22, VB08, Van97b, Van16, Var16, VEV<sup>+</sup>19, Vel23, VBI<sup>+</sup>23, VM22, Ver22a, Ver22b, VAP<sup>+</sup>21, VC18, Vir16, VCLS21, VKSB15, VBM<sup>+</sup>18, WBR<sup>+</sup>22, WSK22, WX18, Wal07, WAN<sup>+</sup>22, Wal97, WL13, WRBT21, WZZ<sup>+</sup>23, WBK<sup>+</sup>24, War18, Wat95, WvA96, Wei06b, Wei15, WPM<sup>+</sup>20, WAK22, Wes15, Wet20, WPH<sup>+</sup>22, Wie18, WMA<sup>+</sup>22, WKS22, WMA12, WMM18, WO14, Wil97a, WHG17, Wil00, Wil05, Wit21, WV22, XMW10, XL18, XGW23, Yaa23, YKKD19, Yan14, YHX22, Yes15, You08, YMA23, YH21, Zac15, ZTT22, ZTC<sup>+</sup>21, ZAPS20, ZC20, ZWCQ22, ZXZX22, ZXX23, ZXX24, ZL23, Zho97, ZMS18, Zia06, ZKB<sup>+</sup>08, Zie19a, Zie19b, ZRK21, ZRK22, Zuk97, dPPD<sup>+</sup>23, dos01, vd91, van95a, van95b, van95c, van95d, van97a, van98b, van98c, van98a, vRDK99].

**Python** [vRD03, vRD05a, vRD05b, vdOJP<sup>+</sup>20, vdH18, vF97, Bri06, HHM18, Ano97a, Ano13, Ano15a, Ano15b, Hor22, Joh97, Lak17, Lip21, Lip22, Liu22, Myr15, Orr05, Roo98, Sa<sup>+</sup>23, Sau23, ZMD21, Ano00a, Ano14, Cla15, Gve09]. **Python-3** [MCGK19]. **Python-Based** [BBB02, BKMY04, ddSNX22, Aya14, HWJ<sup>+</sup>21, Ram18a, AZH<sup>+</sup>24, ABGD<sup>+</sup>20, BKMY03, Dav21, Dec04, FNX22, GP22, GCBDDBF23, GPP<sup>+</sup>21, Gup15, JAGP14, Lac06, LHH<sup>+</sup>21, NL23, OBWM23, PBN<sup>+</sup>09, RBP<sup>+</sup>21, SLB<sup>+</sup>23, SFC23, SLA<sup>+</sup>23, Ver22a, VCLS21].

**Python-Buch** [vF97]. **Python/C** [HZ23, van98c]. **Python/Jupyter** [Bar21]. **Python/Numba** [GVLD<sup>+</sup>23]. **PythonFOAM** [MFL<sup>+</sup>22]. **Pythonic** [BLN<sup>+</sup>21, Dal01, ENCS20, JCL<sup>+</sup>20, SRS<sup>+</sup>23]. **Pythons** [Dub05]. **PythonT<sub>E</sub>X** [MS13, Poo16]. **Pythran** [Gue18]. **Pytim** [SHFJ18]. **PyTOPS** [YKKD19]. **PyTorch** [JS24, Mis19, RM19, SH19a, ZGV<sup>+</sup>23]. **PyTracer** [CYKG23]. **PyTransport** [MR18]. **PyTrilinos** [SSH08, Spo12]. **PytuTester** [MBP<sup>+</sup>22]. **pyuca** [Tau16]. **PyUnfold** [BHA18]. **PyUNIxMD** [LHH<sup>+</sup>21]. **pyuvdata** [HJPB17]. **PyVecContour** [MZL<sup>+</sup>23]. **pyvine** [YH21]. **pyvrft** [BE20]. **PyVT** [LRL23]. **pywidgets** [VMRFC23]. **PyWolf** [MR22]. **PyXtal** [FPSZ21].

**Q&A** [Chu02b]. **Qball** [AME<sup>+</sup>21]. **QCOBJ** [VC18]. **QEDv2** [SV14]. **QExpy** [MCGK19]. **QGIS** [ÇA23, Law15]. **qha** [QZwu19]. **QmeQ** [KPK<sup>+</sup>17]. **QOptCraft** [AGMFGE23]. **Qt** [Sum08]. **quadratic** [GS12]. **Quail** [CBLI22, HFF<sup>+</sup>17]. **Quality** [WL20, BRF<sup>+</sup>23, Tos09]. **quantification** [FL15, KMK<sup>+</sup>21, OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, TSG<sup>+</sup>23]. **Quantifying** [ZXZX22]. **QuantImPy** [BT21]. **Quantitative** [KLM14, KLM15, Yan14]. **quantity** [VC18]. **quantity-aware** [VC18]. **QuantLib** [Vir16]. **QuantLib-Python** [Vir16]. **Quantum** [Hig22, NM22, Nil07b, AGMFGE23, GPP<sup>+</sup>21, Gra18, HPT<sup>+</sup>16, JLP23, JNN12, JNN13, KRSD<sup>+</sup>23, KPK<sup>+</sup>17, MD22b, SV14, TMH<sup>+</sup>23]. **Quantum-classical** [NM22]. **quasiharmonic** [LDW<sup>+</sup>21, QZwu19]. **quaternions** [RG18]. **QUBO** [ZTT22]. **Qudi** [BST<sup>+</sup>17]. **QuDPy** [SLB<sup>+</sup>23]. **Quelltext** [DF00]. **Query** [Bis01]. **querying** [Pit18]. **quest** [Ros08]. **Questionnaires** [MD17]. **queueing** [DDMS14]. **quick** [Lob19]. **quickly** [SW15]. **quickstart** [Feh02]. **quimb** [Gra18]. **quivers** [GS12]. **QuTiP** [JNN12, JNN13].

**R** [Hor22, Lip22, Liu22, Sau23, AVS20, BP17, Dan18a, GH18, GHN19, Mil14, Mil15, Mü13, Piñ24, Smi17, Smi18, SMM<sup>+</sup>22, XMW10, XDR21]. **R/PY** [AVS20]. **R/PY-SUMMA** [AVS20]. **R/Python**

[AVS20]. **R13** [TT21]. **Radar** [FLS<sup>+</sup>20, HC16]. **radiation** [WAN<sup>+</sup>22]. **radiolysis** [AME<sup>+</sup>21]. **Ramp** [SYGY21]. **Random** [Hag17, KJ14, Pat16, PRH17, AYI<sup>+</sup>24, CSRV13]. **range** [Pip15, Sar14]. **ranging** [She97]. **ranking** [KPKS22]. **rankings** [Cas20]. **Rapid** [Ano01b, GDP18, RDS07, Ree04, RCRS06, Sum08, UVa95, Gar09, ST<sup>+</sup>07]. **rare** [LRvE17]. **Raspberry** [AG23, BW14, Cox14, Don14, MAFM21, Nix15]. **RaspberryPi** [MBP<sup>+</sup>22]. **RaspyControl** [AG23]. **Rate** [CRL21, DCOC<sup>+</sup>19, McF16]. **rates** [SZNW23, WZ18]. **Rational** [Ano00c]. **Ratios** [DF21b]. **Raton** [Hor22, Lip21, Lip22, Sau23]. **Ravishankar** [Myr15]. **Raw** [WL20]. **ray** [CG17]. **raytracing** [Gir21]. **RC** [MAFM21]. **RCLAda** [Mos20b]. **RDBMS** [DDK19]. **Reaching** [Gre07]. **reacting** [Gal22]. **reaction** [WZ18]. **reader** [Sta19]. **readership** [Myr15]. **reading** [HB16, VAP<sup>+</sup>21]. **ready** [Ada14]. **reagent** [Pop10]. **Real** [CWM<sup>+</sup>21, FLS<sup>+</sup>20, RAH<sup>+</sup>01, SGPHD<sup>+</sup>17, VCR17, WPH<sup>+</sup>22, AG23, Bri06, GHT08, Gup15, HAC<sup>+</sup>23b, Jos15, Kar14, Lot14a, Sar14, Yan14]. **real-life** [Yan14]. **Real-Time** [CWM<sup>+</sup>21, FLS<sup>+</sup>20, SGPHD<sup>+</sup>17, AG23, HAC<sup>+</sup>23b]. **Real-World** [VCR17, GHT08, Gup15, Jos15, Kar14, Lot14a, Sar14]. **Realistic** [CHM24, CMS22]. **Reality** [UVa95]. **realtime** [MDRN18]. **recall** [HFF<sup>+</sup>17]. **receiver** [LYZ<sup>+</sup>22]. **Receptury** [BJ14b]. **Recipes** [BJ14a, Mis19, Buc15, Cox14, Law15, Per14b, Ros14, Sar14]. **Reciprocal** [Sco17]. **recognition** [ESM24]. **recognizer** [KF23]. **recoloring** [TEG18]. **Recommending** [STS<sup>+</sup>18]. **reconciled** [BCC<sup>+</sup>18]. **Reconfigurable** [Kla99]. **reconnecting** [Lon08]. **Reconstruction** [OPA<sup>+</sup>14, BYWW23, MMG19, SR19]. **Recordings** [TS14]. **Records** [GRG21]. **recursion** [SG07]. **reduced** [PGM19]. **Reduction** [BTR14, MTPHH18, MSV23]. **Reed** [Jan10]. **refellips** [RGP<sup>+</sup>22]. **Reference** [Ano00b, BE20, Lut98b, Lut02, WBS22, van98c, vRD05a, BS19, Bea00, Bea01, Bea06, Bea09b, CJYH23, GHT08, Lob19, Lut05, Lut14, Stu03, Stu07, van95b, van95c]. **Referenz** [EK08]. **Refinement** [CJ22, LP19]. **RegCPython** [ZXX23]. **region** [Ott18]. **region-based** [Ott18]. **Regional** [Sta21, LPG<sup>+</sup>23]. **regions** [HJJ<sup>+</sup>22]. **Register** [ZXX23]. **Register-based** [ZXX23]. **Regression** [BHF16, Lip22, Piñ24]. **Regular** [Stu03, Stu07, YH21, LR14, Rom14, SM04]. **Reguläre** [SKS08]. **reinforcement** [dPPD<sup>+</sup>23]. **Related** [DD15, KCVM22, ML16a, Wes15]. **relations** [KF23]. **relationship** [LFT09]. **Relative** [HAB<sup>+</sup>20, MTS<sup>+</sup>18]. **relativity** [CFPS23]. **relaxation** [WMM18]. **Relaxations** [Wit15]. **RelaxPy** [WMM18]. **Release** [Chu02a, vRD03]. **Released** [Ano00c]. **Releases** [Ano00c]. **reliability** [LTT<sup>+</sup>24]. **Religions** [Wil00]. **remapping** [GKK<sup>+</sup>23]. **remarkable** [Tos09]. **remediation** [TFAL21]. **Remote** [PLRG22, AG23]. **Renewables** [GMKRS21]. **renormalization** [JS24]. **repair** [BRM10]. **replacement** [Ano12]. **replay** [BRM10]. **Replication** [Ano21]. **Report** [Ano21, CM07, Pop10]. **Representation** [SDP<sup>+</sup>20, AZLY18, HPH12, SH17]. **Reproducible** [Coe17, LeV09, BLE21, MBA<sup>+</sup>22, SMM<sup>+</sup>22]. **reprogramming** [OMGDG14]. **requests** [CV15]. **resampy** [McF16]. **Research** [AMB19, BVB<sup>+</sup>07, LeV09, Liu22, Mir18, Par22, TS20]. **Researcher** [Moo21]. **réseau** [Swi09]. **reservoir** [MGFO23]. **Residual** [SJK<sup>+</sup>21]. **resilience** [ZTC<sup>+</sup>21]. **ResiPy** [ZTC<sup>+</sup>21]. **Reslicing** [RDBC23]. **RESNET** [SJK<sup>+</sup>21]. **Resolution** [Ble20]. **resolved** [SL20]. **Resonance** [MB07]. **Resource**



[Bru09, SFC23, VFMM08]. **Resources** [Cas17]. **Response** [LR23, FRdN21]. **responses** [SDP<sup>+</sup>20, SLB<sup>+</sup>23]. **responsive** [Ull15]. **REST** [Suc13]. **restrained** [ABS20]. **Result** [BLS<sup>+</sup>23]. **Results** [Ano21, Pop10]. **RETCON** [BRM10]. **Retrievals** [JCL<sup>+</sup>20]. **retrofitted** [TTS<sup>+</sup>10]. **retuschieren** [DF00]. **Reusable** [Mit00]. **reuse** [Kno08]. **Revamping** [Sav23]. **reverse** [Sei09]. **Review** [Ano97b, Ano97a, Ano00a, Ano13, Ano14, Ano15a, Ano15b, Cla15, Gve09, Hor22, Ish17, Ish19, Jan10, Joh97, Lak17, Laz22, Lee17, Lip21, Lip22, Liu22, Mat16, Orb18, Orr05, Roo98, Sa'23, Sau23, Wep15]. **Reviews** [Ano00b, Bax01, Hug01, HSD<sup>+</sup>22, Le 24]. **Revisiting** [CHM24]. **Revolve** [HA20]. **Rexx** [Pre03]. **Reyes** [Liu22]. **rft1d** [Pat16]. **RGBXY** [TEG18]. **RGBXY-space** [TEG18]. **RGEs** [LS17]. **rheology** [ECS23]. **Rhodium** [HGHR20]. **RhythmCount** [VM22]. **rhythmicity** [VM22]. **Rich** [Lac06, Lac06]. **richtig** [DF00]. **Riemannian** [HAGH18]. **rifarensu** [SM04]. **Right** [HKM08, Buc15]. **Rigidity** [HS22]. **rigidPy** [HS22]. **Rigorous** [LV20]. **riparian** [CVV23]. **river** [CVV23]. **RNA** [SAB<sup>+</sup>20]. **RNA-Seq** [SAB<sup>+</sup>20]. **Robinson** [Ano00a]. **Roborueda** [GCBDBF23]. **Robot** [GMS17, Len15, Mos20b]. **robotics** [BKMY03, BMK03, BKMY04, Els23, Len15, Men09, OMGDG14]. **Robots** [KB07, FMPS17, Men09]. **Robust** [CX23, HGHR20, Pal14, SK19]. **Robustness** [CFMR19]. **rock** [Ras20, YMA23]. **rockphypy** [YMA23]. **Rong** [Sa'23]. **Rookies** [MSW08]. **ROOT** [DOS17]. **root\_numpy** [DOS17]. **roots** [GS12]. **ROPTLIB** [HAGH18]. **ROS** [Len15]. **Rossum** [Chu02b, Dou98, Kuc98a, Sev15a, Sev15b]. **rotational** [BGHC23]. **Rotten** [ADP21]. **Round** [Luk23]. **Round-Off** [Luk23]. **Routines** [Mül13]. **rowan** [RG18]. **RPC** [Por03]. **RPython** [MRG17]. **RSOME** [CX23]. **Ruby** [SKS08, Bla02, Bla04, Gut04, Ngu08d, Ngu08e, Stu07, ZMD21]. **rule** [Sto13]. **rules** [SK19]. **run** [Pip15]. **Running** [Ber13, SW15]. **Runtime** [CHM24, VSS17]. **Russell** [Ano00b]. **Rust** [ABCV21, LH20].

**S** [VMRFC23]. **S2352711016300395** [DPF<sup>+</sup>21]. **safe** [Men09]. **Saha** [Ano15b]. **salabim** [vdH18]. **SALib** [HU17]. **Salt** [Hos12]. **sample** [McF16]. **sampled** [GEH19, SH19a]. **Sampling** [BFM18, OPA<sup>+</sup>14, SN12, YH21]. **San** [ACM92, Ano97c]. **Sarkas** [SSD<sup>+</sup>22]. **SATLAS** [GdGB<sup>+</sup>18]. **SC'20** [IEE20]. **Scalable** [ENCS20, GFB<sup>+</sup>14, LR23, Lon08, RPL<sup>+</sup>23, RSRT19, Mos20a, Pip15, RV20]. **scale** [BL97b, BHJ<sup>+</sup>18, BCG05, EPF<sup>+</sup>23]. **scales** [PBN<sup>+</sup>09]. **Scaling** [MAC14, ZGV<sup>+</sup>23]. **scattering** [AZH<sup>+</sup>24, HJK<sup>+</sup>24]. **Scatterplot** [FM16]. **scheduling** [SUM21, dPPD<sup>+</sup>23]. **Scheme** [DF00, GNPP23]. **Schemes** [BHF16, Sta17]. **schlably** [dPPD<sup>+</sup>23]. **schneider** [Wei06b]. **Schrödinger** [MD22b]. **schwimmbad** [PWFM17]. **Science** [Bad20, BCE<sup>+</sup>22, Bar21, CBST24, HHJCRB21, HKGvS21, IEE97b, Lan08, MT18, Van16, VMFG17, BM15, HHK<sup>+</sup>09, Jos16, Lan06, Lan07, Lob19, Mad15, MT19, MR07, Mil14, Mil15, Nel15, PSGL21, Rad06, RMZG06, Ras18, Ros14]. **Sciences** [Has16, SLA<sup>+</sup>23]. **Scientific** [BKRT21, DGMP09, DY96b, DY99, HTA<sup>+</sup>97, Hin02, Oli07, PG07, PGH11, SDS00, Sma12, VB08, BL97b, Ber13, CLM05, CSRV13, DDMS14, FKA<sup>+</sup>17, Hil15a, Hil20, JAGP14, Lak17, Lan09, Lan11, Lan12, Meh15, Nil07a, NEGZG18, Ras18, RCRS06, RRRGVD19, SML06, Wep15, YFD98]. **Scientist** [Dow15, KHD<sup>+</sup>16, Dow09, DDK19]. **Scientist-Orientated** [KHD<sup>+</sup>16].

**Scientists**

[Hor22, MA11, Nag17, Sau23, Ste14].  
**scientometric** [Le 24, RRRGVD19].  
**ScientoPy** [RRRGVD19]. **Scikit** [HLR15].  
**Scikit-spectra** [HLR15]. **SciPy** [Ber13].  
**SCO** [DF00]. **Scope** [Myr15]. **Scopus**  
[RK19]. **Scott** [Ano19, Mit00]. **scraper**  
[Nai14]. **scraping** [Mit15, Nai14]. **scratch**  
[Jos16, Len15]. **screening** [DB22].  
**Scriptable** [RK19]. **Scripting**  
[Ano98d, Bea98, Dör08, Hin07, Kak08,  
Lan08, Lut98a, Lut01, McG98c, Ngu08e,  
Pre03, Rem01b, Wei06a, AW06, Bea96,  
BL97b, CEI<sup>+</sup>12, FhDAF09, LS97, Lan06,  
Lan07, Ngu08d, She97]. **Scripts**  
[Bla04, GTC21, HW19, LM03, She97,  
Van97b, Ano12, Bla02, Ngu08d, PMBF17,  
Vai09, Vai14]. **sDNA** [CC20]. **seamless**  
[Els23, SHTE23, THG<sup>+</sup>23]. **seamlessly**  
[CV15]. **searches** [WBK<sup>+</sup>24]. **Searching**  
[KBLJ18, LKK23, PP23]. **Seattle** [CI96].  
**Sebastopol** [Ano97a, Ano00a]. **secml**  
[PDS<sup>+</sup>22]. **Second**  
[Ano00b, Orb18, USE96, Ano00c]. **Secret**  
[Swe13, Lot14b]. **Secure** [PDS<sup>+</sup>22, SST23].  
**Security** [Dan18b, ACS23, O'C13, Ste06].  
**SED** [Dav21, Bla02, Bla04]. **SEDBYS**  
[Dav21]. **Seiki** [SM04]. **Seismic**  
[TLR21, NL23]. **Seitz** [Ano15a]. **selection**  
[SVY09]. **Selective** [Zuk97]. **Selenium**  
[Gun14]. **Self**  
[VMFG17, FH22, HWW<sup>+</sup>15, MD15].  
**self-consistent** [FH22]. **Self-Explain**  
[VMFG17]. **self-optimizing**  
[HWW<sup>+</sup>15, MD15]. **semantic** [OA17]. **Semi**  
[Ano97d, LV20, KVSC21].  
**Semi-Automatic** [LV20]. **semi-empirical**  
[KVSC21]. **Semi-Structured** [Ano97d].  
**semiconductors** [AM21, BMZ<sup>+</sup>18].  
**Semidefinite** [Wit15]. **semistructured**  
[HGMC<sup>+</sup>97]. **SEML** [ZV19]. **sendmail**  
[Ano00b]. **sense** [Mad15]. **Sensitivity**  
[HU17, WPM<sup>+</sup>20]. **Sensor** [KBC<sup>+</sup>20]. **Seq**  
[SAB<sup>+</sup>20, SNB<sup>+</sup>19]. **sequence** [CJGA23].

**sequence-to-sequence** [CJGA23].  
**sequences** [HM22, WBS21]. **serial**  
[CLM05]. **Series** [BKH<sup>+</sup>22, HMB23, KSB12,  
VBI<sup>+</sup>23, ASAA20, EAMSR<sup>+</sup>23]. **Server**  
[Ang00b, Ang00c, Ano00c, Ano01b, GMS17,  
Mit00]. **serverless** [AFL23]. **Servers**  
[Kla99]. **services** [CV15]. **setups**  
[CWM<sup>+</sup>21]. **Seven** [Pre00]. **Shaped**  
[RDBC23]. **Sharded** [ZGV<sup>+</sup>23]. **shared**  
[Ren23]. **sharing** [Hos14]. **sharpen** [Ros14].  
**Shawcroft** [Ano19]. **shell**  
[AME<sup>+</sup>21, Bla02, Bla04]. **shmlast** [Sco17].  
**short** [MDRN18]. **Should** [How06].  
**Showcase** [USE00]. **SIAM** [HTA<sup>+</sup>97]. **side**  
[Jos16]. **Signal**  
[APS10, CRL21, VBI<sup>+</sup>23, MD22a]. **signals**  
[JKST22]. **Signatures** [RG20]. **significance**  
[BW22, BWS23]. **Silicon** [ACZ<sup>+</sup>22]. **similar**  
[AAYK23]. **similarity** [MRT<sup>+</sup>22, ZC20].  
**Simple**  
[MAFM21, MMP<sup>+</sup>22, AW06, BS21, CKC23,  
GWM18, Lub14, She97, WHG17, ZXX24].  
**simplex** [PP23]. **simplification** [Gal22].  
**Simplified** [ZV19]. **simplify**  
[GQCP<sup>+</sup>18, HLS006, BB22b]. **Simplifying**  
[NO23]. **SimPrily** [GQCP<sup>+</sup>18]. **simulate**  
[Len15]. **Simulating**  
[MMEH08, AME<sup>+</sup>21, BFT20, GPME23,  
MR22, Mar17, SV14, Sch21, TMH<sup>+</sup>23].  
**Simulation**  
[CZZ19, JPOB20, Osa17, AM19, ABGD<sup>+</sup>20,  
BSG<sup>+</sup>16, BYL<sup>+</sup>21, CS21, DPH16, DFC18,  
DPF<sup>+</sup>21, DRFB<sup>+</sup>23, FC17, KXK<sup>+</sup>23,  
SFC23, WAK22, vdH18, vdOJP<sup>+</sup>20].  
**Simulations** [AMB19, MBLA19, MSS<sup>+</sup>19,  
SMF<sup>+</sup>23, CMM14, DyH21, DEMM19, FH22,  
GQCP<sup>+</sup>18, HHP<sup>+</sup>16, ML16b, RKVL14,  
RE22, San13, SHFJ18, THG<sup>+</sup>23, Wie18,  
WMA<sup>+</sup>22]. **Simulator**  
[LFN<sup>+</sup>11, NS22, ZL20]. **simultaneously**  
[TQGE23]. **SimuPy** [Mar17]. **single**  
[IHT23]. **single-molecule** [IHT23].  
**Singular** [CJ22, Gal22]. **singularities**  
[SL21]. **Sismic** [DM20]. **site** [DMC<sup>+</sup>15].

**sites** [RDS07]. **situ** [MFL<sup>+</sup>22]. **sized** [LRvE17]. **sizing** [Hug18]. **Skew** [Wim12]. **Skew-Symmetric** [Wim12]. **Ski** [MH18]. **skijumpdesign** [MH18]. **Skill** [Ngu08d]. **Skills** [Ano20, DV21, LFT09, Ros14, She15b]. **Skin** [SJK<sup>+</sup>21]. **Slicer** [RDBC23]. **Slitflow** [IHT23]. **Small** [FSZD20]. **Smart** [ABCC22, LFT21, Seg07]. **Smart-Home-Based** [ABCC22]. **Smells** [CCM<sup>+</sup>23]. **SMMP** [MMEH08]. **Smooth** [Pat16]. **Smoothed** [RBP<sup>+</sup>21]. **Snake** [Wit21]. **SNAP** [LS16]. **Snippet** [Har15, Moo21, XMW10]. **SOA** [Suc13]. **SoC** [LHM14]. **Social** [Liu22, sR11, Rus14, SLA<sup>+</sup>23]. **SODA** [ACZ<sup>+</sup>22]. **Soft** [AJYH18]. **Software** [ACM97, Ano01b, AGR24, BH12, Coe17, Gve09, HPT<sup>+</sup>16, Hin03, IEE97b, KWBB22, LRvE17, MMP<sup>+</sup>22, ML16a, Mül23, PLRG22, PHH<sup>+</sup>12, RRRGVD19, STS<sup>+</sup>18, SdSS16, SJL18, TFAL21, Tro96c, Tro96a, Tro96b, Tro97, Ver22b, WL20, Yes15, AME<sup>+</sup>21, BWMS22, CG17, CWLG<sup>+</sup>21, DPH16, DMD<sup>+</sup>21, Dow09, GNPP23, HAC<sup>+</sup>23b, Hen08, JAGP14, KSS20, KS21, KCS11, KI19, LYZ<sup>+</sup>22, MLB22, PARS22, Ros08, SR19, SGZ23, TV13, WBS22, WV22, YMCF23, ZAPS20, ZKB<sup>+</sup>08, ZRK21, ZRK22, ddSNX22, Ano00c, Ano01b, FNX22]. **solar** [HHM18]. **Solaris** [DF00]. **Sold** [RAH<sup>+</sup>01]. **Soldier** [RAH<sup>+</sup>01]. **Soloff's** [CWC<sup>+</sup>23]. **solute** [DMC<sup>+</sup>15]. **Solution** [BT06, LMW12, Bra13, DCOC<sup>+</sup>19, Mis19, SSH16]. **Solutions** [Tro96c, Tro96a, Tro96b, Tro97, Sar14, TF23]. **Solve** [Dah18b, DB17, MSL<sup>+</sup>07, GNPP23, Kar14, She15b, Wil05]. **solvent** [CBB14]. **solvent-filled** [CBB14]. **Solver** [TT21, CFCB17, CBB14, LPH23, Par22]. **Solvers** [CL06, CFMR19, MOM21, MSP<sup>+</sup>22, SSH08]. **Solving** [Bar21, LD19, Luk23, ŠBA<sup>+</sup>15, CKK<sup>+</sup>13, MD21, SKS23]. **something** [Orl97]. **Sometimes** [Wil02]. **sophisticated** [She97]. **Sorted** [Har15]. **soundness** [VSS17]. **Soup** [Nai14]. **Source** [Anoxxd, AMB19, CX23, EML21, HYG16, JPOB20, LFN<sup>+</sup>11, MMP<sup>+</sup>22, MOM21, Ray98, AG23, Bah15, BK19, BLN<sup>+</sup>21, CR22, CV22, CFW17, CG17, CBLI22, DPH16, ESM24, FL15, FNX22, FH22, GNPP23, HAC<sup>+</sup>23b, HU17, Idr14, JNN12, JČMG11, KPK<sup>+</sup>17, KSH14, MAS<sup>+</sup>22, MDRN18, MBP<sup>+</sup>22, NZPWR22, OE21, OBWM23, PSGL21, SML06, SSS22, SGZ23, TOPC23, TV13, Ull15, YHX22, YMCF23, You08, ZRK21, ZRK22, ddSNX22]. **sous** [Bla02, Bla04]. **Space** [JWHS16, STS<sup>+</sup>18, SBMD14, LDAL20, TEG18, ÇA23]. **Space-Time** [JWHS16, LDAL20]. **Sparse** [Wit15, LRPD18, SZW<sup>+</sup>22]. **Spatial** [LVH<sup>+</sup>18, CZ22, CC20, GEH19]. **spatio** [LRL23]. **spatio-temporal** [LRL23]. **Special** [Bal12, Kor11]. **Special-Function** [Kor11]. **species** [WV22]. **Specific** [AAB22, HWW<sup>+</sup>15, Sla15, WRBT21]. **Specified** [MH18]. **spectra** [Mur18, HLR15]. **Spectral** [CH17, Spe19]. **Spectrometry** [SN12]. **Spectrometry-Based** [SN12]. **spectroscopic** [RGP<sup>+</sup>22]. **spectroscopies** [SL20]. **Spectroscopy** [HLR15]. **spectrum** [WPH<sup>+</sup>22, CH17]. **Speculative** [JCY<sup>+</sup>19, BB17]. **SpharaPy** [GEH19]. **sphere** [Hac23a]. **spherical** [LJ23]. **sphstat** [Hac23a]. **spike** [MK16]. **spin** [MFQ<sup>+</sup>21, TMH<sup>+</sup>23, VMRF23]. **spin-half** [TMH<sup>+</sup>23]. **spin-one** [TMH<sup>+</sup>23]. **spin-polarizers** [MFQ<sup>+</sup>21]. **Spinney** [AM21]. **Spinsim** [TMH<sup>+</sup>23]. **spot** [ÇA23]. **Sprachgrundlagen** [EK08]. **Spring** [Eur91]. **Springer** [Sa'23]. **SQL** [Bad20, SCAK<sup>+</sup>19, Ano20]. **SQLAlchemy** [Cop08, Gar09]. **squeezing** [Ano19]. **Sridevi** [Myr15]. **SRIM** [OZW18]. **SSI** [PBK22]. **stability** [TQGE23]. **stable** [BVV22, LJ23]. **stack** [Ras18, Hos12]. **Stage**

[AWO<sup>+</sup>21]. **Standard** [Bie21, Lun01, Gar09, HCPF95, OE21, Spi18]. **Standardization** [RKR21]. **Starbase** [Ano00c]. **Starch** [Ano15a, Ano15b]. **Stark** [CFSK14]. **Stark-effect** [CFSK14]. **Stars** [Gre07, Dav21]. **start** [Cha15, Cla15, Her14]. **Started** [Nai14, BCRS15, Hos12, McG07b, Nix15, Ric13]. **Starting** [Gad09]. **Stata** [HHJCRB21, SMM<sup>+</sup>22]. **State** [PBB22, SBMD14, LHH<sup>+</sup>21, MSV23, Wei15]. **state-of-the-art** [MSV23, Wei15]. **statechart** [DM20]. **states** [LKK23, KBLJ18]. **Static** [Mar21, AES<sup>+</sup>22, FhDAF09, RJAL09, RF16]. **statically** [CEI<sup>+</sup>12, IOC<sup>+</sup>12]. **statically-typed** [IOC<sup>+</sup>12]. **statistical** [BWMS22, CSRV13, HR20, MSV23, San13, Wei15]. **Statistics** [Has16, Hor22, ICVG14, JWHS16, Sau23, Sha24, SLGB14, Hac23a, RCT23, Sah15, Ish17]. **StatMechGlass** [BWMS22]. **Status** [DF21a]. **Steering** [YFD98]. **Stencil** [LLL<sup>+</sup>20]. **Step** [Liu22]. **Step-by-Step** [Liu22]. **Stern** [CBB14]. **stimulation** [XGW23]. **stk** [TBJ18]. **Stochastic** [CX23, PHF10, CR22, OE21]. **Stop** [Ray98, Wit21]. **Storage** [BDT13, IEE20, KI19, NEGZG18, PFH<sup>+</sup>16]. **store** [Fas18]. **stored** [HF06]. **Stplanpy** [Boe23]. **Straightforward** [Dah18c, Arb14]. **strain** [SH19b]. **strategies** [BDT13, PFH<sup>+</sup>16]. **Strategy** [MWS18, SYGY21]. **streamline** [GKK<sup>+</sup>23]. **streams** [BRF<sup>+</sup>23]. **street** [Boe17]. **string** [Huc18]. **Structure** [BLN<sup>+</sup>21, CSZ<sup>+</sup>19, BGHC23, BWMS22, FPSZ21, HTH<sup>+</sup>20, JPJ<sup>+</sup>23, SZNW23, WBK<sup>+</sup>24]. **Structured** [Ano97d, DB22, Kra22, Mur18]. **Structures** [ISMA18, Jan10, RZ09]. **Structuring** [Ngu08a]. **stub** [vd91]. **Student** [Lee17, SG07, SL08, WX18, Ish19, KN15]. **Students** [SDS00, HS13, Lon08]. **Studies** [JWHS16, BLE21, ÜK12]. **Studio** [SW14, SW14]. **Study** [CASA22, KCVM22, Kra22, TS14, AGMFGE23, AJJF14, FSMCFP23, HZ23, LJ19, LHM14, LKF23, OMGDG14, Rad08, RCRS06, SSS22, TFAL21, WRBT21]. **Studying** [MAFM21, May21]. **stuff** [Swe14]. **Stunden** [Wal07]. **Style** [Wei06b, WBK<sup>+</sup>24]. **Styles** [AGR24]. **Subglacial** [SMF<sup>+</sup>23]. **subspaces** [CHG<sup>+</sup>16]. **substances** [Zie19b]. **Subtype** [AWO<sup>+</sup>21]. **Successful** [RMZG06]. **such** [Gup15]. **suitability** [OMGDG14]. **suite** [BST<sup>+</sup>17, SSD<sup>+</sup>22, GDP18]. **SUMMA** [AVS20]. **Summarization** [VPO19]. **Summit** [Ray98]. **Supercomputing** [BLP<sup>+</sup>21]. **Supersymmetric** [Bie21]. **support** [DDK19, HB16, HMD<sup>+</sup>96, IOC<sup>+</sup>12, MCGK19, Tab10]. **Supporting** [HBS<sup>+</sup>20, KL97]. **supports** [SML06]. **supramolecular** [TBJ18]. **survey** [Ish17, ICVG14, MTS<sup>+</sup>18, RRRGVD19, BLE21]. **SuSe** [RAH<sup>+</sup>01]. **sustainable** [Boe23]. **SVG** [Ada14]. **SW** [Wu13]. **Swallowed** [CG23]. **Swarm** [Mir18]. **SWIG** [Bea96, Bea98, Cot03]. **SWIGLAL** [Wet20]. **Switching** [GRG21]. **Switzerland** [IEE97a]. **Symbolic** [FLR22, JCY<sup>+</sup>19, AM10, BKC14, Cri18, HOB23, MSP<sup>+</sup>17]. **symbolically** [Dah18b]. **Symmetric** [Wim12, CFSK14]. **symmetry** [CFSK14, FPSZ21]. **Symposium** [ACM97, CLT20, HK95, IEE97a]. **SymPy** [JČMG11, MSP<sup>+</sup>17]. **synchronizing** [DTM<sup>+</sup>18]. **Synchronous** [HA20]. **synchrony** [MK16]. **Syngress** [Ano13, Ano14]. **Syntax** [SS13, Lob19]. **Synthesis** [HWJ<sup>+</sup>21, MCF<sup>+</sup>22]. **synthesizing** [LWH<sup>+</sup>10]. **System** [Ang00a, Ano00c, BHS18, Bru09, EVV12, IG19, Kor11, LLL<sup>+</sup>20, PG07, ZGL20, CS21, CR22, DRFB<sup>+</sup>23, FLR22, GJ08, Hos12, HMD<sup>+</sup>96, KCS11, KL97, Sil14, Ste06, GKK<sup>+</sup>23, Mos20b]. **Systems** [Ano21, BKRT21, CI96, CJ22, ESM98, Eur91, KDC<sup>+</sup>18, LP19, Luk23, LFT21, MS07, MGS07, USE96, AGMFGE23, AG23, CR15,

DPH16, Dah18c, Dah18b, DFC18, DPF<sup>+</sup>21, DDMS14, FC17, Gal22, HAC<sup>+</sup>23b, HHM18, JNN12, JNN13, JCMG11, LHM14, Mar17, MMP11, Pal14, QZWU19, SUM21, SP23, SAA18, SLA<sup>+</sup>23, TMH<sup>+</sup>23, VSS17, ZTC<sup>+</sup>21].

**T** [Ano00b, Ano13, Ish17]. **tailor** [Cox14]. **tailor-made** [Cox14]. **Taint** [CR12]. **Taking** [Luk23]. **tale** [GHT06]. **talk** [Sie17]. **Taming** [Els23]. **tasca** [Day07a]. **Task** [GMS17, Fee16, HBS<sup>+</sup>20, SLA<sup>+</sup>23]. **Tasks** [MD17, PF22, Sar14]. **TauRunner** [SLP<sup>+</sup>22]. **Taylor** [Lip21, Lip22]. **TBJ** [HHVB21]. **Tcl** [SML06, Ass96, DF00, Bla04, Ngu08d, Ngu08e, Bla02, LS97, McG98c, Pre03]. **Tcl/Tk** [Ass96, McG98c]. **TDD** [Sal14]. **TDDFT** [HAC<sup>+</sup>23b]. **TE** [LS17, SS21]. **teacher** [Myr15]. **Teaching** [AMB19, GL07b, GL08c, KLM14, KLM15, BKMY03, BKMY04, CBLI22, MBK09, Par22, RMZG06]. **tech** [Cas17]. **TechMiner** [Vel23]. **Technical** [KDC<sup>+</sup>18, PM23, BCRS15, BS19, TFAL21]. **technique** [YMCF23]. **Techniques** [Joh15, Mat16, Bow15, Idr14, Lan13, MS15, Mil14, Mil15, Per14b, TSC02, WPH<sup>+</sup>22]. **Technologies** [USE96]. **Technology** [ACM97, AGR24, ESM98, Hos14, Lon08]. **Ted** [Cla15]. **teens** [Lam15]. **tegdet** [BJM23]. **Teik** [Sa'23]. **Teleconferencing** [Ago01]. **TeMIP** [AW06]. **Template** [How98]. **templating** [LC11]. **Temporal** [LVH<sup>+</sup>18, BII<sup>+</sup>20, LRL23]. **Tennessee** [RE22]. **tensor** [JS24, SZW<sup>+</sup>22]. **Tensorial** [TT21]. **Teoh** [Sa'23]. **Teradata** [SCAK<sup>+</sup>19]. **terms** [MD22a]. **Test** [Gov15, HAB<sup>+</sup>20, HMB23, Ngu08a, Per14a, Ang99, LKF23, SAD22, TTHZ23]. **Test-driven** [Gov15, Per14a]. **tester** [MBP<sup>+</sup>22]. **Testers** [GPKL<sup>+</sup>20, O'C13]. **Testing** [ABCC22, Duf15, Sal14, YH21, Arb14, Buc15, DM20, Gun14, LC11, MBA<sup>+</sup>22, Moh15].

**Tests** [Ano21, ADP21, GH18]. **Tethys** [LVH<sup>+</sup>18]. **TeX-like** [Thu22]. **Text** [Aya14, DF00, Mer03, VPO19, Per14b]. **textbook** [Hor22, Myr15]. **TextCL** [PF22]. **TFInterpy** [CZ22]. **their** [GS12]. **theKompany.com** [Ano01b]. **theoretic** [Boe17]. **Theory** [GRG21, LR23, Cri18, JEC18, MWK<sup>+</sup>20, SSH16, VCF22]. **Thermal** [ZGL20, BDQ<sup>+</sup>22, TS20]. **thermochemical** [LWV20, WV22]. **Thermochemistry** [LWV20]. **thermodynamic** [Hug18]. **Thermodynamics** [OL17]. **thermoelasticity** [LDW<sup>+</sup>21]. **Thermofeel** [BDQ<sup>+</sup>22]. **they're** [LS97]. **things** [McK16, DAJ<sup>+</sup>15, SST23]. **Think** [Dow15, Dow09]. **thinking** [HHK<sup>+</sup>09]. **Thomas** [KSB12]. **thoroughly** [BM15]. **Threaded** [Pul00]. **Threading** [MLGW18]. **Threads** [Wei06a]. **Three** [Bea12, MWS18, Ros08]. **Three-Strategy** [MWS18]. **throughput** [GQCP<sup>+</sup>18, OLRLB21]. **tight** [JPJ<sup>+</sup>23, KVSC21]. **tight-binding** [JPJ<sup>+</sup>23, KVSC21]. **Time** [Ano98d, CA23, CWM<sup>+</sup>21, FLS<sup>+</sup>20, Hor23, HMB23, JWHS16, KSB12, VBI<sup>+</sup>23, Wil01, ASAA20, AG23, BJM23, EAMSR<sup>+</sup>23, HFB21, HAC<sup>+</sup>23b, LJ19, LDAL20, MWM20, NM22, RF16, SGPHD<sup>+</sup>17, TTS<sup>+</sup>10, WMA12]. **Time-dependent** [Hor23]. **tip** [GHT06]. **Tits** [GS12]. **Tk** [Ass96, Bla02, Bla04, McG98c]. **Tkinter** [Ano00b, Wei06b, Gra00]. **TM** [Jac02]. **Today** [Bar21, LS98]. **Toe** [Sa'23]. **tokamak** [BYWW23]. **tomographic** [MMG19]. **tomography** [BYL<sup>+</sup>21, LYX<sup>+</sup>18]. **tongue** [GHT06]. **Too** [RAH<sup>+</sup>01]. **Tool** [BLN<sup>+</sup>21, GMKRS21, HYG16, MH18, VBB18, Bea96, BBHB22, Con95, DPH16, DRFB<sup>+</sup>23, FL15, GP22, GPEM23, GYWG23, JM20, Law15, LYZ<sup>+</sup>22, Lot14b, LFT21, LS17, MB17, MWM20, NS22, OBWM23, PMBF17, RRRGVD19, SLB<sup>+</sup>23, SHTE23,

SABEh20, SH19b, Ver22a, YKKD19, You08].  
**Toolbox** [GRKN<sup>+</sup>19, LWV20, RKR21, SLGB14, Sta21, BHJ<sup>+</sup>18, CV22, GEH19, HPT<sup>+</sup>16, HFF<sup>+</sup>17, KG23, KMLP<sup>+</sup>23, MMG19, RSPJ21, Sch21, WPM<sup>+</sup>20, XGW23].  
**Toolchain** [ACZ<sup>+</sup>22]. **Toolchest** [Ang99].  
**Toolkit** [CK00, HC16, ISMA18, Jac02, Rem01a, Tal00, WBR<sup>+</sup>22, War18, BVV22, BMZ<sup>+</sup>18, DCRF23, LRL23, MZL<sup>+</sup>23, MD21, Mir18, RMM23, Ros18, SML06, TCE21, TQGE23, TBJ18, Wie18, WMA<sup>+</sup>22, ZWCQ22, ASAA20]. **toolkits** [LS98]. **Tools** [Ano00c, Ano01b, Cas17, DGMP09, LeV09, Ano18, CFW17, Gar09, Gun14, Meh15, SW14, Wes15, ESM98, LDAL20, Zie19b].  
**TOOLS-23** [ESM98]. **toolset** [LC11]. **Top** [CG23, Ano20, Cas20, CFSK14]. **top-again** [Cas20]. **Topics** [LT03, RRRGVD19].  
**Topography** [SMF<sup>+</sup>23]. **TOPSIS** [YKKD19]. **torcpy** [HBS<sup>+</sup>20]. **toroidal** [CMS22]. **Toronto** [USE96]. **total** [Swe14].  
**Tour** [Ngu08b, van98a]. **Tracing** [MD15, ABF13, BBH<sup>+</sup>15, HS12, LFT09, PFH<sup>+</sup>16].  
**TRACK** [SP23]. **Tracking** [ML16a, Ver22a]. **tradeoffs** [AJJF14, IOC<sup>+</sup>12]. **train** [MK16]. **Training** [Wal07]. **trajectories** [BFT20, LRL23].  
**trajectory** [HHB<sup>+</sup>22]. **trans** [NL23].  
**trans-dimensional** [NL23]. **Transactional** [Ano01b, BRM10, Tab10]. **transcendent** [Ros08]. **transcranial** [XGW23]. **transfer** [MPMC21, NO23, SAA18]. **transform** [MTS<sup>+</sup>18, MBA19]. **transformation** [Vai09, Vai14]. **transformations** [LGS10, MRT<sup>+</sup>22, Tid07]. **transforms** [WSK22]. **transient** [MPMC21].  
**Transition** [KBLJ18, LKK23, MP19a].  
**translating** [Men09]. **translation** [AJJF14, GS12]. **Translational** [BCE<sup>+</sup>22].  
**Transparent** [AFL23]. **transpilation** [MCF<sup>+</sup>22]. **Transpiling** [LH20].  
**Transplant2Mongo** [HW19]. **Transplantation** [HW19]. **transport** [ABGD<sup>+</sup>20, KPK<sup>+</sup>17, SP23, WAN<sup>+</sup>22].  
**transportation** [Boe23]. **trapped** [BFT20].  
**TRAPping** [Ern99]. **traveltime** [Gir21].  
**Traversal** [BSSz<sup>+</sup>20]. **treatment** [SJL18].  
**tree** [Mos20a, NS22]. **Trees** [SN12, RBV16].  
**TreeSim** [NS22]. **TreeSwift** [Mos20a].  
**trend** [RRRGVD19]. **Triangle** [PKDM21].  
**triangles** [LJ23]. **Trilinos** [Spo12]. **Trivial** [CASA22]. **Tromsø** [Eur91]. **Trust** [TAD23]. **ttcrpy** [Gir21]. **Tubular** [ISMA18]. **Tucson** [Ano97d]. **Tuner** [FLR22]. **Tuning** [BII<sup>+</sup>20, BE20].  
**tunneling** [SZNW23]. **Tuplex** [SK19].  
**TurboGears** [MBW07, RDS07]. **TurboPy** [RGS<sup>+</sup>21]. **turbulent** [ML16b, ML18]. **turn** [Law15]. **Tutorial** [Wat95, vRD05b, Hig03, KD99, SMM<sup>+</sup>22, Sto13, van95d, vRDK99].  
**Tutorials** [AGR24]. **TV** [Wal07]. **Twisted** [FL06, Kin05]. **Twitter** [STS<sup>+</sup>18]. **Two** [Ros08, LS17]. **two-loop** [LS17]. **Type** [KCV22, LD19, Men09, RF16, VSS17].  
**Type-Related** [KCV22]. **type-safe** [Men09]. **typed** [BDT13, CEI<sup>+</sup>12, IOC<sup>+</sup>12].  
**types** [Ren23, VSS17]. **typesetter** [Thu22].  
**typing** [FhDAF09, Sie17, TSD<sup>+</sup>12, VKSB15]. **typy** [OA17].  
**U.P** [Lee17]. **u.v.m** [EK08, The09].  
**Ubiquitous** [AJH<sup>+</sup>12]. **Übungen** [Wei06a].  
**udkm1Dsim** [Sch21]. **Ugly** [Bea09a]. **UI** [Ull15]. **UI/UX** [Ull15]. **UIST** [ACM97].  
**UK** [Smi17]. **UKCensusAPI** [Smi17].  
**ultrafast** [Sch21, SLB<sup>+</sup>23]. **ultrashort** [MD22a]. **Ultrasound** [RDBC23].  
**umfassende** [EK08, EK09]. **Umgang** [DF00]. **Umsteiger** [The09]. **uncertain** [McK16]. **Uncertainty** [TSG<sup>+</sup>23, FL15, FPN<sup>+</sup>22, KXK<sup>+</sup>23, KMK<sup>+</sup>21, OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, WPM<sup>+</sup>20, WKS22]. **uncover** [Lot14b]. **undergraduate** [MCGK19, Myr15]. **understand** [Wei15].  
**understandability** [ABCV21].  
**Understanding**

[Gut16, Orb18, BM15, LFYX23].  
**Underwater** [GRKN<sup>+</sup>19]. **Undo** [Zuk97].  
**Unearthing** [SSS22]. **unfolding** [BHA18].  
**Unicode** [Swi09, Tau16]. **Unification**  
 [AAC<sup>+</sup>98]. **Unified** [Kra22]. **uniform**  
 [MFQ<sup>+</sup>21, PWFM17]. **uniformly** [GEH19].  
**uniqueness** [SGZ23]. **unit**  
 [Hac23a, LC11, LKF23, Sal14]. **unit-testing**  
 [LC11]. **units** [GZT<sup>+</sup>18]. **Univariate**  
 [Sha24]. **universals** [SKS23, SMD23].  
**University** [Gve09, Liu22]. **Unix**  
 [DF00, Eur91, SML06, GJ08, Ngu08e].  
**unleash**  
 [Cox14, Gal14, Hia15, MH15, Phi15].  
**Unleashed** [MGS07]. **unlock**  
 [Gal14, RO15a]. **Unparametrized** [KSB12].  
**Unsupervised** [AVS20]. **Untapped**  
 [Bru09]. **Untriviality** [CASA22].  
**unweighted** [GH18, GHN19]. **unyt**  
 [GZT<sup>+</sup>18]. **Upcrossing** [Pat16]. **Update**  
 [Ano00c, DF21a, DFC18, DPF<sup>+</sup>21, Kuc97].  
**updated** [KMLP<sup>+</sup>23]. **Updates**  
 [Ano00c, Ano01b, HPT<sup>+</sup>16, LRvE17,  
 PHH<sup>+</sup>12, Yes15]. **uPy** [AJH<sup>+</sup>12]. **UQpy**  
 [OGA<sup>+</sup>20b, OGA<sup>+</sup>20a, TSG<sup>+</sup>23]. **USA**  
 [CLT20, HK95, USE00]. **Usage**  
 [MSS<sup>+</sup>19, ZMD21]. **Use**  
 [How06, KFV20, SJL18, Bea96, HPH12,  
 PAB<sup>+</sup>97, Pop10, Sah15, Tom15]. **use-case**  
 [HPH12]. **used** [Wei15]. **useful** [Dah18a].  
**User**  
 [ACM97, Ano01a, Cha01, DF00, GRG21,  
 SJL18, BCM21, GCBDDBF23, GPP<sup>+</sup>21,  
 LYZ<sup>+</sup>22, Mac91, Mac92a, MTS<sup>+</sup>18].  
**user-friendly** [BCM21, GPP<sup>+</sup>21, LYZ<sup>+</sup>22].  
**Using** [AMGM20, APS10, Bie97, Bis01,  
 BCG05, CL06, CSRV13, Cot03, DD15, Est01,  
 GAS<sup>+</sup>16, Gut13, Gut16, HLSØ06, HAB<sup>+</sup>20,  
 HS13, IG19, Jan10, KJ15, LM03, Liu22,  
 Lut99, MSL<sup>+</sup>07, OOM<sup>+</sup>23, Orb18, Osa17,  
 PH23, RM19, SBC<sup>+</sup>17, Sha24, SJK<sup>+</sup>21,  
 SGZ23, TT21, Vir16, XMW10, Ada14,  
 AG23, Ber13, BS21, BJM23, BWMS22,  
 BB17, BII<sup>+</sup>20, CV15, CKK<sup>+</sup>13, CBB14,  
 Cox14, Dan18a, DRFB<sup>+</sup>23, FMPS17, Gar09,  
 GFB<sup>+</sup>14, GNPP23, Gup15, Hia15, HCPF95,  
 JS24, JPJ<sup>+</sup>23, Jos15, Kar14, Lan13, Len15,  
 Lot14b, Lot15b, MS15, MCF<sup>+</sup>22, Meh15,  
 MH15, Myr15, Nel15, Nil07b, OLRLB21,  
 Pal14, PP23, Pay11, Per14b, PFLG21,  
 RDS07, RJAL09, RZ09, RK19, SCAK<sup>+</sup>19,  
 SL21, Sha03, SP23, SZW<sup>+</sup>22, SMM<sup>+</sup>22,  
 Tab10, TTHZ23, Ull15, Vel23, Wes15, Wil05,  
 Zac15]. **Utilities** [RKR21, Ras18]. **Utility**  
 [CHG<sup>+</sup>16, DBdFdSR21, Ano12]. **utilize**  
 [Bah15, SW15]. **utilizing** [LC11]. **UX**  
 [Ull15].

**V** [Orb18, MMEH08]. **V2X** [SYGY21]. **v4.1**  
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 [SABEh20]. **values** [MTS<sup>+</sup>18, SL21].  
**VaMpy** [DB17]. **VanderPlas** [Ish17].  
**Variability** [CRL21]. **variable**  
 [AAYK23, RGP<sup>+</sup>22]. **Variables**  
 [KJ14, Wit15, GKK<sup>+</sup>23]. **Variational**  
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 [DCRF23]. **VCF** [HB16]. **VCFPy** [HB16].  
**vectorial** [CMS22, Hac23a]. **vectorized**  
 [MZL<sup>+</sup>23]. **vegetation** [CVV23].  
**Velocimetry** [ML16a]. **ventilator**  
 [MBP<sup>+</sup>22]. **verbosity** [ABCV21].  
**Vererbung** [Wei06a]. **Verification**  
 [JPOB20]. **versatile**  
 [BVV22, BKMY03, BKMY04]. **Version**  
 [BWS23, BTDT23, Him23, HQF<sup>+</sup>20, SKS23,  
 TBD23, ZRK22, KMLP<sup>+</sup>23]. **Versionen**  
 [DF00]. **vessel** [LRL23]. **via** [CR12, LKK23,  
 NM22, TAD23, TEG18, YHX22]. **Video**  
 [Wal07, RMM23, SGPHD<sup>+</sup>17].  
**Video-Training** [Wal07]. **vielen** [The09].  
**Viewer** [Ano00c]. **Vine** [YH21]. **Violent**  
 [O'C13, Ano13]. **Virtual**  
 [MRG18, UVa95, MRG17, PFH<sup>+</sup>16, BE20].  
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**Visualization**

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