A Complete Bibliography of the *ACM Transactions on Computing Education (TOCE)*

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Title word cross-reference

\[
\begin{align*}
\times & \quad [\text{GML}^+23]. \\
1 & \quad [\text{LRS}21, \text{Zin}15].
\end{align*}
\]

\[
\begin{align*}
12 & \quad [\text{BBSPK}22, \text{GES}14, \\
& \quad \text{GYSH}19, \text{HAGM}14, \text{HAG}15b, \text{JK}20, \\
& \quad \text{OWK}21, \text{Tag}24, \text{TM}14, \text{TSAA}^+23].
\end{align*}
\]

\[
\begin{align*}
\text{16-18} & \quad [\text{All}23].
\end{align*}
\]

\[
\begin{align*}
19 & \quad [\text{MSV}^+23].
\end{align*}
\]

\[
\begin{align*}
2 & \quad [\text{RSL}22].
\end{align*}
\]

\[
\begin{align*}
6 & \quad [\text{IKWR}22].
\end{align*}
\]

\[
\begin{align*}
7\text{th} & \quad [\text{SA}20].
\end{align*}
\]

\[
\begin{align*}
= & \quad [\text{GML}^+23].
\end{align*}
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\[
\begin{align*}
\text{ABC} & \quad [\text{REB}23].
\end{align*}
\]

\[
\begin{align*}
\text{ABET} & \quad [\text{Blu}22].
\end{align*}
\]

\[
\begin{align*}
\text{Abilities} & \quad [\text{AJNN}20, \text{JNA}18].
\end{align*}
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\begin{align*}
\text{Ability} & \quad [\text{Tag}24].
\end{align*}
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\[
\begin{align*}
\text{Abstraction} & \quad [\text{DSU}20, \text{KDV}22, \text{SSD}09, \text{SA}20].
\end{align*}
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\[
\begin{align*}
\text{Academia} & \quad [\text{NJK}19].
\end{align*}
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\[
\begin{align*}
\text{Academic} & \quad [\text{KPM}18, \text{WF}24].
\end{align*}
\]

\[
\begin{align*}
\text{Academics} & \quad [\text{SDBJ}19].
\end{align*}
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\begin{align*}
\text{Academies} & \quad [\text{DLM}11].
\end{align*}
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\begin{align*}
\text{Accessibility} & \quad [\text{CGZ}^+20, \text{PLB}^+12, \text{WCPF}20, \text{vdMHV}23].
\end{align*}
\]

\[
\begin{align*}
\text{Accomplishment} & \quad [\text{ZD}15].
\end{align*}
\]

\[
\begin{align*}
\text{according} & \quad [\text{MM}12].
\end{align*}
\]

\[
\begin{align*}
\text{Accreditation} & \quad [\text{Blu}22].
\end{align*}
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\begin{align*}
\text{Achievement} & \quad [\text{AANK}14, \text{BJCS}21, \text{CHA}17, \text{Zin}15].
\end{align*}
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\begin{align*}
\text{ACM} & \quad [\text{BX}^+24, \text{Ko}22a, \text{TM}09, \text{CB}19].
\end{align*}
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\[
\begin{align*}
\text{Across} & \quad [\text{AM}21].
\end{align*}
\]

\[
\begin{align*}
\text{Action} & \quad [\text{IT}17, \text{LMGV}^+16].
\end{align*}
\]

\[
\begin{align*}
\text{Active} & \quad [\text{VI}13, \text{IT}13].
\end{align*}
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\begin{align*}
\text{Activities} & \quad [\text{MDS}16, \text{MJ}23, \text{RK}20].
\end{align*}
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\begin{align*}
\text{Activity} & \quad [\text{LC}21].
\end{align*}
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\begin{align*}
\text{Adaptive} & \quad [\text{VM}22].
\end{align*}
\]

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\begin{align*}
\text{Adding} & \quad [\text{BLNC}09, \text{DJHG}19].
\end{align*}
\]

\[
\begin{align*}
\text{Address} & \quad [\text{RvJP}20].
\end{align*}
\]
[BSA, BSP24, FTD, FWD, LGGS, MFH, RTE, RHH, TBB, WDC, WF, ETN]. Blending
[CHA, IT]. Block [GBB, WW]. Blocks
[Bra, CG]. Bloom [DTD]. BlueJ
[B]. Bob [RWS, PD, TBP].


Brain-Computer [CG]. Brains [CG].

Brazilian [DBG, Bridge].

Bridging [LR, Briefs]. Bring [RW, BR]. Bringing [HB]. Broadening
[CHH, DBB, LV, LV, Ros].

Bugged [ABD, Building].

[SG, TDMN].

C [WX]. Calculus [CKS]. California [TMSA]. Camp [BS]. Camps
[LG, OPC]. Can
[ASG, IDC, LGP, SNG, Sho].

Candidate [BKZ]. Capital
[FTD, VSK]. Capitalize [IDC].

Capstone [DJG, PD, TBP].

Capstones [SH, Capturing]. Cards [TBP]. Career [DBR, LRJ, MHP, RHSS, SNG].

Careers
[BCZ, OPC, PG, RCS]. Case
[BBD, BAR, BCC, BWE, GND].

DMB, GND, GM, KMB, LSS, Par, SSD, OS. Cases
[SK]. Cash [RMM]. Cash-free [RMM].

Causal [DBM]. Centered
[GMM, LR, SAG, RSL, RC].

CER [DM]. Challenges
[ALHR, BBG, GES, SGHZ, VGRM, VGM]. Change
[AB, FP, PS]. Characteristics
[All]. Characterizing [YB]. Chat
[HCAT]. Chatbot [PD].

ChatGPT
[RWS, Sho]. Child [HHM].

Children
[DCW, WDC, WDCT, vdMHV]. China [CJS]. Chinese [TB]. Choice
[ASG, LRJ, MHP, RHSS]. Choices
[MD, Chutes]. CISing [YBV].

Class [BHHM, PCH, YR]. Classes
[Xin].

Classifying [All, SPC].

Classroom [BWE, GMM, HB, LSSM].

Classroom-Based [SSS]. Classrooms
[RPT, WW, ZCJ]. cloud [ZPB].

clouds [RKK]. CO [TDMN].

Coach [ABCD, CJS, DJH, ILR, NCO].

SOb, VMFG, HAA, LC, NJK.

Code.org [MMR, Code].

Coding
[BKZ, KOS, LG, W, TMSA].

Cognition [Rob]. Cognitive
[DSZ, JR, RJ, TAL].

Cohort
[BT]. Collaboration [B].

Collaborative
[CDK, MBSB, TDMN, VFFT].

College [BJC, BSS, CKS]. EKSW, GMM, LR, LD, MDS. RP, WDK.

Colleges [She].

Collusion [KSC]. Color [DMB].

Combining [CDB, HAC].

Comments [VMFG]. Communication
[BBG, TK, MGA].

Communications [MA].

Communities [LC]. Community
[FKG, KDH, LDR]. Como [Vog].

Comparative [FWD]. Comparing
[DSU, ECF, WW]. Comparison
[CJS].

Competence [SS, TSK].

Competency
[BF, Lai]. Competitive
[COK]. Compiler [SSD]. Complexity
[EK, KD].

Complications [TSV].

Comprehension [KV]. Compulsory
[DHJ]. Computational
[EVM, FKG, FEC].

GGB, KLS, KCB, KKNL, KOS, PG. KBB, MBR, PE, RG, SNOT, Tag.

TMII, VMFG, WDC, WDCT.
WHS+17, WSP+11, YMZ+14, YR15.

**Computer**


**Computer**

[AM21, Bar09, BH16, BMB+18, BBF+21, BXS+24, Bur11, CHA17, CAL15, CB19, CGZ+20, CGON24, DBR11, DMBP22, DLM11, DZS22, DBG+23, EKSW11, EBC+21, ETN+21, ET12, ECF18, FTD+24, FWD+24, GND19, GHT+11, GGH+10, GYSH19, GK17, HSI+19, HCSA22, HM22, HOC17, KLS+14, KRH+24, KG18, LRS21, LV11a, LV11b, LSTA22, LR11, LRH+22, LZRO24, LC21, MFR13, MHP20, MSK+23, MT23, MBE+16, MAHC+22, MDS16, MCK17, MW22, MS11, NAG+23, O’G12, OWK21, OHR22, Pad24, PM09, PG23, PCC+24, RB21, Rob22, RLM+22, RHSS20, RP19, RVJP20, RMM21, RSL22, SH18a, SDBJ19, SYP24, SNG+22, SSC18, SH18b, SS23, TP23, TM09, TM10, TM11a, TM11b, TM14, TC19, TM22, TBB24, TSAA+23, WCPF20, WF24, YR15, AGEL13, HAA13, NCLN13].

**Concept**

[GGH+10, IIRY17, PHP+22].

**Conceptions**

[RvJP20, VS22, Xin15].

**Conceptual**

[TPQE18].

**Conceptualizing**

[MT23, TM22, Ten23].

**Concurrently**

[BAGM13].

**Conditions**

[RPT+22].

**Consider**

[NCW22].

**Considerations**

[TBP21].

**Considered**

[DJGIO20].

**Considers**

[CGZ+20].

**Consortium**

[BCD10].

**Constructionist**

[MSH10].

**Content**

[BSS20, EHA+23, VMAG22, WCPF20, YB19].

**Context**

[GEME14, LZRO21, ORS16, Rob22].

**Contextualization**

[LBMB24].

**Continency**

[AHL17].

**Continues**

[Hun17], **Continuing** [All23].

**Continuum** [CB19].

**Contributions** [DM23, HCAT23].

**Controlled** [Bal22, DSUP20, DSU20, MC19, WX18].

**Conversation** [Ros29].

**Conversion** [HM21].

**Cooperative** [BC13].

**Coordinator** [RB22].

**Copying** [DJHGI19].

**Core** [JNA18, ZPB13].

**Correctness** [DHH+15].

**Counter** [EBC+21].

**Counter-hegemonic** [EBC+21].

**Countries** [GES14, TSAA+23].

**Context** [RVSW23].

**Course**

[AHL17, BHHMG21, BTF+19, BCZ19, CKSS21, CSDLK17, EK17, IT17, KKL16, LK18, MTG21, NGK11, PDF15, RB22, Rit09, She13, SH10, WX18, Wan11, d’A10].

**Courses** [ASG19, CHA17, CDK+14, Ip12, MFCLG19, Mit14, OHR22, Pad24, Ric09, RB22, SSF+19, SNG+22, SBH+18, TBP21, TK16, UR17, VMAG22, HAA13, LGP13].

**Coverage** [ECF18].

**COVID** [MSV+23].

**COVID-19** [MSV+23].

**CPD** [All23].

**Crafts** [KLS+14].

**Crafts-Oriented** [KLS+14].

**Creating** [Rit09].

**Creation** [CFE19].

**Creativity**


Early [CHA17, MR22, OHR21, RSPB17, HAA13].

EarSketch [MFM*+16]. earth [ZPB13].

Easing [Bra24]. Easy [WBK*+22].

Ecosystem [FTD*+24]. Editor [Hum17].

Editorial [MT23, RVI09, TM11a, TM11b, TM14, TM22]. Editors [BB10]. Educating [KSCP22]. Education [AMD22, AM21, BDGT14, BLM*+14, Blu22, BH16, BCC*+19, BBF*+21, BXS*+24, Bur11, CAL15, CB19, CJS*+17, DZS22, EKSW11, EBC*+21, ET12, FTD*+24, Fie19, GES14, GND19, GVA22, GlGG*+23, GKI7, GEM14, HSI*+19, HCSAz22, HM19, HHM19, Hub12, HAG14, HAG15b, HOC17, ILRD20, IIRY17, IKWR22, JK20, Joh19, KMW22, Kie09, KCB*+23, KMB*+15, KG18, KV15, LRS21, LV11a, LV11b, LMB*+22, LST22, LMH21, LRVW14, LSHY22, MFR13, MFMM*+16, MSK*+23, MT23, MSV*+23, MCK17, MBKS24, MW22, O’G12, OWK21, PLF22, PGJS17, PM09, PCC*+24, RVAN15, RFE21, RWK*+15, RLS*+22, RVI09, RSL22, SYP24, SACY*+21, SH18b, SKM13, SS23, TS20, TP23, TM10, TM11a, TM11b, TM14, TC19, TM22, TWH18, TSAA*+23, VMFG17, VSK22, WF24, YMZ*+14, NCLN13, Sor13, TM09, CB19].

education-friendly [NCLN13].


Efficacy [LBT20, RCS11, CMSP*+19, LY21, ZNF*+20].


emphasizing [IT13]. Empirical [AvdM21, GGT20, MFCG19, MTGM21, Sh03, SS13].


Engagement [BB10]. Ensuring [MRG17, RP19]. Emancipation [EBC*+21].

Embodied [MCK17, MC19]. Emerging [RB21]. Emotions [AL22, AB24].

emphasizing [IT13]. Empirical [AvdM21, GGT20, MFCG19, MTGM21, Sh03, SS13].


Engagement [BB10]. Ensuring [MRG17, RP19]. Emancipation [EBC*+21].

Embodied [MCK17, MC19]. Emerging [RB21]. Emotions [AL22, AB24].

emphasizing [IT13]. Empirical [AvdM21, GGT20, MFCG19, MTGM21, Sh03, SS13].


Engagement [BB10]. Ensuring [MRG17, RP19]. Emancipation [EBC*+21].
Hackathons [Har21]. Happens [RMM21].
Hard [SPC19, WBK+22]. Hardas [DMBP22]. Hardware [BC12, LRWV14].
hegemonic [EBC+21]. Help [COK24, HS13]. Help-seeking [COK24].
Hispanic-Serving [GHT+11]. Hispanics [GHT+11]. Historical [BDDGT14, LZRO21]. History [BCD10].
Holistic [NKL11]. Home [BBF+21]. Hours [PHRC21]. HTML [PDF15].
i*CATch [NCLN13]. ICT [TSK12]. IDE [HOC17, OHR22]. IDE-Based [HOC17].
Ideas [SNOT21]. Ideation [LLF22, TBP21]. Identification [RJJ10]. Identify [LRJ14].
Identifying [AANK14, GVA22, LK19, WBK+22].
Improved [OHR22, TWH18]. Improving [IT17]. In-Classroom [MRG17]. In-Code [VMG17]. Incarceration [SAYC+21].
Including [PLB+12]. Inclusion [IKWR22, LLF22]. Inclusive [GML+23].
Incubators [LC21]. Indian [RVAN15].
Influencing [COK24]. Informal [CMS+19]. GEME14, LC21, SAYC+21].
Informatics [BLM+14, KS14].
Information [BF23, CHH+11, KKNL21, KPM18, MHP20, MAK12, RCS11, YBV23].
Informatively [WBK+22]. Informed [CMS+19].
Influencing [MBB+18, LD19].
Institutions [CJS+17, GHT+11].
Instruction [LG22, MJ+23, MW18, Shi16, LGP13].
Instructional [IKWR22, BC13].
Instructor [AWW15, SPC19]. Instrument [REB23]. Instruments [MSK+23].
Insufficient [KV15]. Integrate [KCB+23].
Integrated [RG19]. Integrating [CDK+14, HAA13, SSF+19, TK16].
Integration [BSY+10, KPM18].
Intelligence [AM22, FPSS23, LGGS22].
Intent [DBG+23]. Intention [ZD15].
Intentions [DBR+20, SNG+22, TABA12].
Interaction [CHU+09, KG22, OHR22].
Interactions [MC19]. Interactive [BSY+10, HEE+19, JK20, TSK12].
Intercultural [AM21]. Interest [BJCS21, CMS+19, DBR+20, MW22, OPC17, Zin15].
Interface [CG19]. Internship [KG22].


Literal [MS19]. Literature [BXS24, EVM24, GbGG23, HCSZ22, KJH19, LSTA22, PCC24, PO20, QL17, Sha22].

Low-performing [LZT+19]. Lower [IRY17, MSV+23].

Machine [BLNC09, Fie19, LMGVS+16, LZT+19, SSF+19, SF19, SPC19, TDMN+24].

Machines [FU10a, MBR23, Sor13]. Major [LRJ14, MDS16, SNG+22, ZJWF11].


Maladaptive [FPSS23]. man [RMM21].

Manager [VGM+23]. Managing [BCC+19]. Many [HAG15b, ZPB13].


Measures [CHA17]. Measuring [GBB+17, Lar16, LBT20, WDC15].

Mechanisms [SOB24]. Medium [She13].

Medium-sized [She13]. Memoriam [HAG15a].

Mentoring [BSP24, MSH10]. Mentors [BSP24]. Merging [Kar09].

Meta [DCW19, UR17]. Meta-Analysis [UR17].

Meta-Synthesis [DCW19].

Metacognition [LMB+22]. Method [AHL17, VI13, VFFT16]. Methodology [MISH10, SH18a].

Methods [FEC17, LLK18, PO20, BC13]. Middle [DBR+20, FEC17, KO22b, MR22, OPC17, TABA12, WSP+11].

Middle-School [TABA12]. Milestones [SNOT21]. Mindset [RKM20].

Mindsets [FPSS22]. Minecraft [KO22b].

Mirror [BSP24, LGGS22].


ML [TDMN+24]. MLExAI [RMNC10].

Model [BF23, BFB+21, BCD10, EHBA+23, HOC17, LMGVS+16, RVAN15, RMNC10, Shi16, SK24, SSB+23, TDMN+24, WDCT20, CHM13]. model-driven [CHM13].

Models [Bol22, LRJ14, Mit14, SSB+23].

Moderator [RPT+22]. MOOC [CHP+18, KV15]. Most [EK17]. Motivate [BHHM21].

Motivated [ASG19].

Motivation [MBE+16, McG12b, NGK11, WF24].

Motivations [CGZ+20]. Move [RS14].

Movements [MPDS24]. Multi [BMB+18].

Multi-Institutional [BM18].

Multilingual [JMN+22, Vog21].

Multimodal [RG19]. Multiple [ASG19, CHU+09]. Multiple-Choice [ASG19]. multipurpose [NCLN13].

Musicians [Fie19]. Must [SYP24]. Myself [MRG17].

National [KWB20, TM14].

Navigating [FTD+24]. Need [Ber23]. Needed [DM23].

Needs [Ip12]. Network [MW18].

Networks [PO20]. Next [KMWW22, Ko22a].

Nexus [MAK12]. Nigeria [TSAA+23].

No [PLB+12]. Non [DHJG19, GVA22, Har21, LBT20, SPC19, RB22]. Non-Compulsory [DHJG19].

Non-CS [RB22]. Non-Formal [LBT20]. Non-Majors [SPC19].

Non-Technical [GVA22]. Non-traditional [Har21].

not-traditional [RC13].

Normative [Bhu22]. Norms [HCSAz22].

North [KMB+15]. North-Rhine [KMB+15].

Noticing [DBM24]. Notional [MBR23, Sor13].

Novice [ABCD20, BA17, BWTS+23, CG19, KM16, MK19, MS19, WSLR23, Xin15].

Novices [RT15].

NZ [BAR14].

Object [AANK14, BS10, KKLL16, Shi16, Xin15].

Object-Oriented [AANK14, BS10, KKLL16, Shi16, Xin15].

Objectives [PM09].

Objects [Xin15].

Offering [Par23].

One [KMW22].

Online [BBG12, DJHG19, FKG17, HM21, VMAG22, VFFT16].

Open


Processes [RJJ10]. Processors [SH10]. 
Procrastination [PD22]. Productivity [DSU20]. 
Professional [All23, CGON24, EVM24, ET12, ECF18, FDW19, KPM18, MJB+23, PHRc21, RSPB17, SDBJ19, SSSC18, VS22, YZC19]. 
Professionals [AJNN20, BF23, JNA18]. 
Professions [LG21]. Profiles [KPM18]. 
Program [DSS21, EHPR+23, HM21, KRH+24, KDV22, McGl2b, RSPB17, RT15, RV09, SKM13, UFV09, HS13]. 
Programadores [Vog21]. Programme [LBT20]. Programmed [WDCT20]. 
Programmer [MK19, YZC19]. Programmers [ABCD20, CG19]. 
Programming [ASG19, AvdM21, Alb20, AAGH14, AANK14, AMSBA15, AL22, AB24, BJCS21, Bra24, BWE11, BA17, BWTS+23, BSV+10, CHA17, CK09, COK24, DSUP20, DSU20, DCW19, FGK17, GBB+17, IT17, KMH16, KMW22, KSCP22, KJH19, Kö10, KM16, KL15, KA16, LLKH18, Lai22, PK19, LY21, LMB+22, LMH21, MRR+10, MPDS24, MMFR20, MFCGI9, MCK17, MC19, MBK24, MS19, MJC23, NGK11, OHR22, PCh09, QL17, RKM20, RJJ10, RB22, RPT+22, RS14, SMGF24, SKM13, SS13, TAL17, UR17, VCMV23, VMAG22, WX18, WW17, WDC15, WHS+17, Xin15, YZC19, vdMHK23, BAGM13, IT13, Sor13]. 
Programs [BBD+10, BSA+23, BS10, CMSP+19, DBG+23, McGl2a, PG23, RBS11]. 
Project [FDW19, IT17, LMGVS+16, Ric09, RMNC10, SBH+18, VGM+23, Wan11]. 
Purpose [TMSA22]. Purposeful [KV15]. Pyrates [Bra24]. Python [Bra24, WX18]. 
Qualitative [AL22, KG22, RB22, SMGF24, YR15]. 
Quality [BPN11]. Quantitative [KLM15]. 
Query [TSV18]. Questions [ASG19, HAG15b, Sho23, Ten14]. 
R1 [BVNN22]. Race [VS22, WDC+24]. 
Racism [VS22]. Raise [VGM+23]. 
Randomized [DSUP20, DSU20]. Rachado [RMM21]. 
Rating [VMAG22]. 
Realist [Pad24]. Reasoning [DBM24, DH+15]. Recognised [DM23]. 
Recommendation [VMAG22]. 
Reconfigurable [SH10]. Recruiting [CMSP20]. Recursion [HEE+19]. 
RecurTutor [HEE+19]. Redesign [TSK12]. 
Redesigning [KKL16]. Reference [MS19, MM12]. Reference-Point [MS19]. 
Reflect [PG23]. Reflections [ET12, Mal23]. 
Reform [GM11]. Regarding [TABA12]. 
Regression [LFU23]. Regular [GML+23]. 
Regulation [FPS23, LMB+22, SMGF24]. 
Relevant [KS14]. Remotely [MC19]. 
Replications [HSI+19]. Reporting [BVNN22, HCSAz22]. Reports [KG22]. 
required [IT13]. Research [BVNN22, Bar09, DCW19, DZS22, EHPR+23, GM14, GbGG+23, HSI+19, HB15, HCSAz22, HOC17, IT17, JK20, KCB+23, KFME11, LMGVS+16, MT23,
MAK12, PM09, SSSC18, SF19, SS23, TS20, TP23, TM11b, Ten14, TM22.
Research-Practice [EHPR+23].
Response [LLF22]. Responsible [MAHC+22, RMM21]. Responsive [RG19].
Restart [BSCH14]. Results [AJNN20, JNA18].
reviews [HAA13]. Rhine [KMB+15].
Sampler [JK20]. Scaffolding [RT15].
Scalable [RWK+15, SH18a]. Scale [BBF+21, BA17, RVSW23]. Scenario [AAGH14]. Scenario-Based [AAGH14].
Scholarship [KRH+24, TM10]. School [Ber23, BSS20, CKSS21, DLM11, DBR+20, EHPR+23, EHPA+23, GM11, IRY17, JNA18, KLS+14, KS14, KO22b, MFM+16, MR22, MSH10, OPC17, RVSW23, RS14, TABA12, WW17, WDK20, WSP+11, ZNF+20, ZCJR20, ZJWF11].
[YBV23]. Serving
[BSP24, GHT+11, MSV+23]. Setbacks
[LD19]. Setting
[FDW19, GGH+10, VS22]. Setup
[AvdM21]. Shape
[WDC+24]. Shaping
[FPSS22]. Shifts
[LZRO21]. Short
[LK19, LBT20]. Short-Term
[LK19, LBT20]. Should
[JNA18, RP19]. Similarity
[NJK19]. Simulation
[RWK+15]. Simulations
[EKSW11]. Singleton
[She13]. Situating
[RVAN15]. Situations
[SMM21]. Situated
[BL14]. Sketch
[BL14]. Sketch-Based
[GVA22, Lar16]. Skills
[Akd23, AJNN20, CGON24, ECF18, JNA18, MGM+23, Tag24, YR15]. Small
[BTF+19, RvJP20, She13]. Smarter
[GML+23]. Smartphones
[RT15]. Snapshot
[ALHR17]. Social
[CHA17, COK24, FTD+24, KPM18, LRJ14, OHR22, RHSS20, RCS11, TC19]. Socially
[RMM21]. Society
[RMM21]. Sociocultural
[VS22]. Software
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