

Aman Yadav

List of Publications by Year in descending order

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Version: 2024-02-01

86
papers

3,378
citations

361045

20
h-index

233125

45
g-index

87
all docs

87
docs citations

87
times ranked

1635
citing authors

#	ARTICLE	IF	CITATIONS
1	Computational thinking in compulsory education: Towards an agenda for research and practice. <i>Education and Information Technologies</i> , 2015, 20, 715-728.	3.5	357
2	Computational Thinking in Elementary and Secondary Teacher Education. <i>ACM Transactions on Computing Education</i> , 2014, 14, 1-16.	2.9	314
3	Problem-based Learning: Influence on Students' Learning in an Electrical Engineering Course. <i>Journal of Engineering Education</i> , 2011, 100, 253-280.	1.9	250
4	Computational Thinking for All: Pedagogical Approaches to Embedding 21st Century Problem Solving in K-12 Classrooms. <i>TechTrends</i> , 2016, 60, 565-568.	1.4	244
5	Expanding computer science education in schools: understanding teacher experiences and challenges. <i>Computer Science Education</i> , 2016, 26, 235-254.	2.7	169
6	Computational thinking for teacher education. <i>Communications of the ACM</i> , 2017, 60, 55-62.	3.3	154
7	Introducing computational thinking in education courses. , 2011, , .		150
8	Learning to Program. , 2016, , .		123
9	Lessons Learned: Implementing the Case Teaching Method in a Mechanical Engineering Course. <i>Journal of Engineering Education</i> , 2010, 99, 55-69.	1.9	105
10	Computational Thinking and Media & Information Literacy: An Integrated Approach to Teaching Twenty-First Century Skills. <i>TechTrends</i> , 2016, 60, 510-516.	1.4	96
11	Computational Thinking in Teacher Education. , 2017, , 205-220.		95
12	Unplugged Approaches to Computational Thinking: a Historical Perspective. <i>TechTrends</i> , 2020, 64, 29-36.	1.4	73
13	If a picture is worth a thousand words is video worth a million? Differences in affective and cognitive processing of video and text cases. <i>Journal of Computing in Higher Education</i> , 2011, 23, 15-37.	3.9	71
14	Students' Emotional Reactions to Programming Projects in Introduction to Programming. , 2017, , .		71
15	Methodological Rigor and Theoretical Foundations of CS Education Research. , 2016, , .		63
16	Results from a Survey of Faculty Adoption of Process Oriented Guided Inquiry Learning (POGIL) in Computer Science. , 2016, , .		59
17	Computational thinking in elementary classrooms: measuring teacher understanding of computational ideas for teaching science. <i>Computer Science Education</i> , 2018, 28, 371-400.	2.7	53
18	Effects of multimedia story reading and questioning on preschoolers'™ vocabulary learning, story comprehension and reading engagement. <i>Educational Technology Research and Development</i> , 2017, 65, 1523-1545.	2.0	49

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19	Who Needs What: Recommendations for Designing Effective Online Professional Development for Computer Science Teachers. <i>Journal of Research on Technology in Education</i> , 2018, 50, 164-181.	4.0	48
20	Computational Thinking as an Emerging Competence Domain. <i>Technical and Vocational Education and Training</i> , 2017, , 1051-1067.	0.3	46
21	Teacher implementation profiles for integrating computational thinking into elementary mathematics and science instruction. <i>Education and Information Technologies</i> , 2020, 25, 3161-3188.	3.5	44
22	Computational Thinking in K-12: In-service Teacher Perceptions of Computational Thinking. , 2018, , 151-164.		43
23	Case-based instruction: Improving students' conceptual understanding through cases in a mechanical engineering course. <i>Journal of Research in Science Teaching</i> , 2014, 51, 659-677.	2.0	38
24	Measuring Students' Sense of Belonging in Introductory CS Courses. , 2021, , .		32
25	Computer Science Pedagogical Content Knowledge. <i>ACM Transactions on Computing Education</i> , 2019, 19, 1-24.	2.9	31
26	The Influence of Problem Solving Abilities on Students' Performance on Different Assessment Tasks in CS1. , 2016, , .		29
27	Transitioning to remote learning: Lessons from supporting K-12 teachers through a MOOC. <i>British Journal of Educational Technology</i> , 2021, 52, 1377-1393.	3.9	28
28	Equitable Learning Environments in K-12 Computing. <i>ACM Transactions on Computing Education</i> , 2019, 19, 1-16.	2.9	26
29	Fostering creativity through computing. <i>Communications of the ACM</i> , 2017, 60, 31-33.	3.3	26
30	The Forgotten Scholar: Underrepresented Minority Postdoc Experiences in STEM Fields. <i>Educational Studies - AESA</i> , 2020, 56, 160-185.	0.4	25
31	Implementing Case Studies in a Plant Pathology Course: Impact on Student Learning and Engagement. <i>Journal of Natural Resources and Life Sciences Education</i> , 2009, 38, 50-55.	0.3	21
32	Learning to teach computer science. <i>Communications of the ACM</i> , 2012, 55, 31-33.	3.3	21
33	Taking the next step: supporting postdocs to develop an independent path in academia. <i>International Journal of STEM Education</i> , 2019, 6, .	2.7	21
34	Teachers'™ Perceptions of Student Misconceptions in Introductory Programming. <i>Journal of Educational Computing Research</i> , 2020, 58, 364-397.	3.6	21
35	Collaborative Learning, Self-Efficacy, and Student Performance in CS1 POGIL. , 2021, , .		21
36	Teaching in an open village: a case study on culturally responsive computing in compulsory education. <i>Computer Science Education</i> , 2021, 31, 462-488.	2.7	19

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37	Measuring computer science pedagogical content knowledge. , 2016, , .		18
38	Case Studies in Engineering. , 2014, , 161-180.		16
39	What Works for Them? Preservice Teachers' Perceptions of Their Learning from Video Cases. Action in Teacher Education, 2008, 29, 27-38.	0.4	15
40	Exploring Lightweight Teams in a Distributed Learning Environment. , 2016, , .		15
41	Motivation, Attitudes, and Dispositions. , 2019, , 801-826.		15
42	Instructing special education pre-service teachers through literacy video cases. Teaching Education, 2009, 20, 149-162.	0.9	14
43	Challenges of a Computer Science Classroom. , 2015, , .		14
44	Approach to Non-Intrusive Load Monitoring using Factorial Hidden Markov Model. , 2018, , .		14
45	Using Hypermedia for Learning Complex Concepts in Chemistry: A Qualitative Study on the Relationship Between Prior Knowledge, Beliefs, and Motivation. Education and Information Technologies, 2006, 11, 33-69.	3.5	13
46	Computing and community in formal education. Communications of the ACM, 2020, 63, 18-21.	3.3	12
47	Computational Thinking and Metacognition. TechTrends, 2022, 66, 405-411.	1.4	12
48	Toward justice in computer science through community, criticality, and citizenship. Communications of the ACM, 2022, 65, 42-44.	3.3	12
49	Integrating Computing and Computational Thinking into K-12 STEM Learning. , 2020, , .		11
50	Smart Learning. Applied Sciences (Switzerland), 2020, 10, 6964.	1.3	10
51	POGIL in CS1: Evidence for Student Learning and Belonging. , 2022, , .		10
52	Risks and uncertainties in virtual worlds: an educators'™ perspective. Journal of Computing in Higher Education, 2013, 25, 49-67.	3.9	9
53	Providing Access and Opportunity for Computational Thinking and Computer Science to Support Mathematics for Students With Disabilities. Journal of Special Education Technology, 2020, , 016264342097856.	1.4	9
54	Applying Levels of Abstraction to Mathematics Word Problems. TechTrends, 2020, 64, 395-403.	1.4	9

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55	Breaking the Code: Confronting Racism in Computer Science through Community, Criticality, and Citizenship. TechTrends, 2022, 66, 450-458.	1.4	9
56	Computer Science and Computational Thinking in the Curriculum: Research and Practice. Springer International Handbooks of Education, 2018, , 89-106.	0.1	8
57	Computer Science Educators Stack Exchange. , 2019, , .		8
58	Preparing Special Education Preservice Teachers to Teach Computational Thinking and Computer Science in Mathematics. Teacher Education and Special Education, 2021, 44, 221-238.	1.6	8
59	Enhancing creativity in synthetic biology with Interactive Virtual Environments. , 2009, , .		7
60	Self-Regulation for High School Learners in a MOOC Computer Science Course. , 2020, , .		7
61	Self-evaluation Interventions: Impact on Self-efficacy and Performance in Introductory Programming. ACM Transactions on Computing Education, 2021, 21, 1-28.	2.9	6
62	Who Belongs in Computer Science?. , 2022, , .		6
63	Learning in Distributed Low-Stakes Teams. , 2015, , .		5
64	Computer Science Teacher Professional Development. , 2017, , .		5
65	POGIL in Computer Science. , 2019, , .		5
66	Self-efficacy Profiles for Computer Science Teachers. , 2021, , .		5
67	Integration of Tobacco Control in Masters of Public Health Curricula of India. Asian Pacific Journal of Cancer Prevention, 2014, 15, 5611-5615.	0.5	5
68	Teacher Views on Computational Thinking as a Pathway to Computer Science. , 2021, , .		4
69	Evaluation and assessment for improving CS teacher effectiveness. ACM Inroads, 2020, 11, 35-41.	0.4	4
70	Culturally Responsive Debugging: a Method to Support Cultural Expertsâ€™ Early Engagement with Code. TechTrends, 2021, 65, 771-784.	1.4	3
71	Professional Development and Support for POGIL in Computer Science. , 2022, , .		3
72	Work in progress - assessing the engineering curriculum through Bloom’s Taxonomy. , 2008, , .		2

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73	Local Classrooms, Global Technologies: Toward the Integration of Sociotechnical Macroethical Issues Into Teacher Education. <i>Bulletin of Science, Technology and Society</i> , 2018, 38, 13-22.	1.1	2
74	Preparing Teachers for Computational Thinking Integration in K-12. , 2021, , .		2
75	Computer Science and Computational Thinking in the Curriculum: Research and Practice. Springer International Handbooks of Education, 2018, , 1-18.	0.1	2
76	Advancing Opportunities for CS Teachers. , 2022, , .		2
77	Introduction: Computational thinking in preK-5. , 2022, , .		2
78	Does context matter? Engineering students' approaches to global vs. local problems. , 2010, , .		1
79	Case-Based Instruction in STEM: Analysis of Student Confidence. , 2016, , .		0
80	Computer Science and Computational Thinking in the Curriculum: Research and Practice. Springer International Handbooks of Education, 2018, , 1-18.	0.1	0
81	Professorial Advancement Initiative: A Cross-Institutional Collaboration to Increase Faculty Diversity in STEM. <i>Frontiers in Psychology</i> , 2021, 12, 733173.	1.1	0
82	Teaching Media and Information Literacy in the 21st Century. , 2018, , 2292-2302.		0
83	Teaching Media and Information Literacy in the 21st Century. <i>Advances in Library and Information Science</i> , 2019, , 77-89.	0.2	0
84	Integrating Computing into K-16 Education. , 2020, , .		0
85	Computational thinking in elementary classrooms: Using classroom dialogue to measure equitable participation. , 2021, , .		0
86	Models for Computer Science Teacher Preparation. , 2022, , .		0