J Ãngel VelÃ¡zquez-Iturbide

List of Publications by Year
in descending order

109	1,331	623734	454955
papers	citations	14 h-index	30 g-index

113	113	113	614
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exploring the role of visualization and engagement in computer science education. SIGCSE Bulletin, 2003, 35, 131-152.	0.1	383
2	Exploring the role of visualization and engagement in computer science education. , 2002, , .		128
3	A Survey of Successful Evaluations of Program Visualization and Algorithm Animation Systems. ACM Transactions on Computing Education, 2009, 9, 1-21.	3.5	89
4	An evaluation of studentsâ€™ motivation in computer-supported collaborative learning of programming concepts. Computers in Human Behavior, 2014, 31, 499-508.	8.5	69
5	Augmented Reality and Engineering Education: A Systematic Review. IEEE Transactions on Learning Technologies, 2021, 14, 817-831.	3.2	37
6	A Systematic Review of the Use of Bloom's Taxonomy in Computer Science Education. , 2018, , .		36
7	GreedEx: A Visualization Tool for Experimentation and Discovery Learning of Greedy Algorithms. IEEE Transactions on Learning Technologies, 2013, 6, 130-143.	3.2	30
8	Toward the effective use of educational program animations: The roles of student's engagement and topic complexity. Computers and Education, 2013, 67, 178-192.	8.3	27
9	Student perception and usage of an automated programming assessment tool. Computers in Human Behavior, 2014, 31, 453-460.	8.5	26
10	WinHIPE. ACM SIGPLAN Notices, 2007, 42, 14-23.	0.2	22
11	An approach to effortless construction of program animations. Computers and Education, 2008, 50, 179-192.	8.3	21
12	InfoVis Interaction Techniques in Animation of Recursive Programs. Algorithms, 2010, 3, 76-91.	2.1	18
13	An Experimental Method for the Active Learning of Greedy Algorithms. ACM Transactions on Computing Education, 2013, 13, 1-23.	3.5	18
14	Evaluating the Effect of Program Visualization on Student Motivation. IEEE Transactions on Education, 2017, 60, 238-245.	2.4	18
15	SRec. , 2008, , .		17
16	Relationship between motivations, personality traits and intention to continue using MOOCs. Education and Information Technologies, 2020, 25, 4417-4435.	5.7	17
17	Technology Acceptance of an Interactive Augmented Reality App on Resistive Circuits for Engineering Students. Electronics (Switzerland), 2021, 10, 1286.	3.1	17
18	Flipped Classroom and AronsonÂ´s Puzzle: a Combined Evaluation in the MasterÂ´s Degree in Preuniversitary Teaching. Education in the Knowledge Society, 0, 22, e23617.	2.0	16

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19	A Design of Automatic Visualizations for Divide-and-Conquer Algorithms. Electronic Notes in Theoretical Computer Science, 2009, 224, 159-167.	0.9	15
20	Pedagogical Effectiveness of Engagement Levels â€“ A Survey of Successful Experiences. Electronic Notes in Theoretical Computer Science, 2009, 224, 169-178.	0.9	15
21	GreedExCol, A CSCL tool for experimenting with greedy algorithms. Computer Applications in Engineering Education, 2015, 23, 790-804.	3.4	14
22	The acceptance of augmented reality in engineering education: the role of technology optimism and technology innovativeness. Interactive Learning Environments, 2023, 31, 3409-3421.	6.4	14
23	Active learning of greedy algorithms by means of interactive experimentation. , 2009, , .		12
24	Analyzing the influence of a visualization system on studentsâ€™ emotions: An empirical case study. Computers and Education, 2020, 149, 103817.	8.3	12
25	The design and coding of greedy algorithms revisited. , 2011, , .		9
26	Systematic Development of Dynamic Programming Algorithms Assisted by Interactive Visualization. , 2016, , .		9
27	Experimentation with optimization problems in algorithm courses. , 2011, , .		8
28	Digital education in the classroom. , 2017, , .		8
29	Interactive AR App for Real-Time Analysis of Resistive Circuits. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2021, 16, 187-193.	0.9	8
30	Recursion in gradual steps (is recursion really that difficult?). SIGCSE Bulletin, 2000, 32, 310-314.	0.1	7
31	An Evaluation of the Effortless Approach to Build Algorithm Animations with WinHIPE. Electronic Notes in Theoretical Computer Science, 2007, 178, 3-13.	0.9	7
32	VAST. , 2008, , .		7
33	Evaluation of a collaborative instructional framework for programming learning. , 2012, , .		7
34	Evaluation of a Didactic Method for the Active Learning of Greedy Algorithms. IEEE Transactions on Education, 2014, 57, 83-91.	2.4	7
35	Report of the Spanish Computing Scientific Society on Computing Education in Pre-University Stages. , 2018, , .		7
36	Evaluating Instructors' Classification of Programming Exercises Using the Revised Bloom's Taxonomy. , 2019, , .		7

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37	Graphical visualization of the evaluation of functional programs. , 1996, , .		6
38	Testing-Based Automatic Grading: A Proposal from Bloom's Taxonomy. , 2008, , .		6
39	How to Improve Assessment of Learning and Performance through Interactive Visualization. , 2008, , .		6
40	SRec. SIGCSE Bulletin, 2008, 40, 225-229.	0.1	6
41	Experiences in Usability Evaluation of Educational Programming Tools. Advances in Game-based Learning Book Series, 2013, , 241-260.	0.2	6
42	Comparing the effectiveness of different educational uses of program animations. , 2012, , .		5
43	Refinement of an experimental approach tocomputer-based, active learning of greedy algorithms. , 2012, , .		5
44	Difficulties, attitudes and misconceptions on experimenting with optimization algorithms. , 2014, , .		5
45	A "Multiple Executions" Technique of Visualization. , 2016, , .		5
46	Influence of Pedagogic Approaches and Learning Styles on Motivation and Educational Efficiency of Computer Science Students. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2016, 11, 213-218.	0.9	5
47	Students' Misconceptions of Optimization Algorithms. , 2019, , .		5
48	Personality Traits and Intention to Continue Using Massive Open Online Courses (ICM) in Spain: The Mediating Role of Motivations. International Journal of Human-Computer Interaction, 2020, 36, 1953-1967.	4.8	5
49	Who Will Continue Using MOOCs in the Future? Personality Traits Perspective. IEEE Access, 2020, 8, 52841-52851.	4.2	5
50	A Review of Teaching and Learning through Practice of Optimization Algorithms. Advances in Higher Education and Professional Development Book Series, 2015, , 65-87.	0.2	5
51	AnÃ¡lisis del â€œpensamiento computacionalâ€•desde una perspectiva educativa. Revista De Educacion A Distancia, 2021, 21, .	1.0	5
52	Visualizing the symbol table. , 2006, , .		4
53	Serious games for motivating into programming. , 2014, , .		4
54	Effortless Construction and Management of Program Animations on the Web. Lecture Notes in Computer Science, 2005, , 163-173.	1.3	4

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55	Experiences in Usability Evaluation of Educational Programming Tools. , 0, , 461-480.		4
56	Design and Evaluation of OptimEx, an Experimentation System for Optimization Algorithms. , 2016, , 51-68.		4
57	How to use the SRec visualization system in programming and algorithm courses. ACM Inroads, 2016, 7, 42-49.	0.6	4
58	A Framework for the Automatic Generation of Algorithm Animations Based on Design Techniques. Lecture Notes in Computer Science, 2007, , 475-480.	1.3	4
59	Fun, rigour and pragmatism in functional programming. SIGCSE Bulletin, 1991, 23, 11-16.	0.1	3
60	A Comparative Study on the Analysis of Students Interactions in e-Learning. , 2008, , .		3
61	Active learning of greedy algorithms by means of interactive experimentation. SIGCSE Bulletin, 2009, 41, 119-123.	0.1	3
62	A Long-Term Evaluation of Educational Animations of Functional Programs. , 2012, , .		3
63	Merlin-know, an interactive virtual teacher for improving learning in Moodle. , 2014, , .		3
64	A programming languages course for freshmen. , 2005, , .		2
65	Assessing the Usability of a Cookies-Based Access Monitoring Tool for a CMS. , 2007, , .		2
66	Interactive visualization of recursion with SRec. , 2009, , .		2
67	Improving compilers education through symbol tables animations. , 2011, , .		2
68	Evaluation Experiences of the Representation Techniques of Greedy Programs: Application to the GreedEx Tool. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2016, 11, 179-186.	0.9	2
69	Recursion Removal as an Instructional Method to Enhance the Understanding of Recursion Tracing. IEEE Transactions on Education, 2016, 59, 161-168.	2.4	2
70	Interactive Learning of Recursion. , 2012, , 254-272.		2
71	The locker metaphor to teach dynamic memory. , 1997, , .		1
72	A system to generate electronic books on programming exercises. Electronic Library, 2002, 20, 314-321.	1.4	1

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73	SOTA. , 2005, , .		1
74	An Educative Application Based on Bloomâ€™s Taxonomy for the Learning of Inheritance in Oriented-Object Programming. , 2008, , 157-166.		1
75	Tail recursion by using function generalization. , 2009, , .		1
76	VAST. , 2009, , .		1
77	Merlin-Mo, an interactions analysis system for Moodle. , 2011, , .		1
78	A problem solving teaching guide based on a procedure intertwined with a teaching model. , 2011, , .		1
79	Observations as a Method to Evaluate a Computer-Based Approach to Learning Algorithms. , 2012, , .		1
80	Project eMadrid: Learning methodologies, gamification and quality. , 2016, , .		1
81	A study on students' preferences in graphical design of algorithm visualizations. , 2016, , .		1
82	OptimEx2: Enhancing an experimentation system targeted at optimization algorithms. , 2017, , .		1
83	The role of basic mathematics concepts in programming teaching and learning. , 2019, , .		1
84	Studentsâ€™ Emotions Using an Algorithm Experimentation Tool in the New Normal. , 2021, , .		1
85	A unified framework to experiment with algorithm optimality and efficiency. Computer Applications in Engineering Education, 0, , .	3.4	1
86	Using Large-Scale Optimality Testing as a Tool for Analysis Tasks in Algorithm Courses. , 2020, , .		1
87	An Approach to the Use and Automatic Generation of Web-Based Learning Materials. Lecture Notes in Computer Science, 2004, , 201-208.	1.3	1
88	Principled design of logical fisheye views of functional expressions. ACM SIGPLAN Notices, 2006, 41, 34-43.	0.2	1
89	Replication of an Evaluation of Teacher Training in the Classification of Programming Exercises Using Bloomâ€™s Taxonomy. , 2022, , .		1
90	Synthesis of functions by transformations and constraints (poster). ACM SIGPLAN Notices, 1997, 32, 317.	0.2	0

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91	Reusable collections of web-based program animations. , 2005, , .		0
92	Visualizing the symbol table. SIGCSE Bulletin, 2006, 38, 341-341.	0.1	0
93	Educational visualizations of syntax error recovery. , 2010, , .		0
94	Student-centered design of a parser visualization tool. , 2010, , .		0
95	Multiple Usability Evaluations of a Program Animation Tool. , 2010, , .		0
96	A first step mapping IMS learning design and Merlin-Mo. , 2011, , .		0
97	Relationship between learning styles, motivation and educational efficiency in students of computer science. , 2014, , .		0
98	An Analysis of Printed Illustrations of Three Algorithm Design Techniques. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2014, 9, 57-63.	0.9	0
99	Interactive visualization as an aid to develop dynamic programming algorithms. , 2015, , .		0
100	Modeling the Collaborative Instructional Framework for LMSs Using Educational Modeling Languages. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2015, 10, 43-50.	0.9	0
101	Panel: What are limits of educational technologies?. , 2016, , .		0
102	Trends in Computers in Education. Revista Iberoamericana De Tecnologias Del Aprendizaje, 2016, 11, 177-178.	0.9	0
103	"Virtual" experimentation on algorithm optimality. , 2016, , .		0
104	A Ubiquitous Computing Environment for Language Learning. Lecture Notes in Computer Science, 2002, , 339-343.	1.3	0
105	Improving a Zoom+Pan Interface with Overview+Detail or Focus+Context Features: A Comparative Evaluation. , 2009, , 1-17.		0
106	Improving Students Learning Programming Skills with ProGames â€“ Programming through Games System. Lecture Notes in Computer Science, 2013, , 579-586.	1.3	0
107	Calculating encoding and decoding functions for prefix codes. ACM SIGPLAN Notices, 1999, 34, 54-60.	0.2	0
108	Addressing Studentsâ€™ Creativity in Algorithm Design. , 2020, , .		0

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109	Adaptation of the College of Computer Scientists' Standard for Technical Final Degree Projects. , 2021, , .		0