Patrick MÃ¤der

List of Publications by Year
in descending order

97	3,242	331670 21	265206 42
papers	citations	h-index	g-index

98	98	98	2713
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Recommending plant taxa for supporting on-site species identification. BMC Bioinformatics, 2018, 19, 190.	2.6	332
2	Machine learning for image based species identification. Methods in Ecology and Evolution, 2018, 9, 2216-2225.	5.2	267
3	Plant Species Identification Using Computer Vision Techniques: A Systematic Literature Review. Archives of Computational Methods in Engineering, 2018, 25, 507-543.	10.2	247
4	Software traceability: trends and future directions. , 2014, , .		197
5	Automated plant species identificationâ€"Trends and future directions. PLoS Computational Biology, 2018, 14, e1005993.	3.2	189
6	Acquiring and preprocessing leaf images for automated plant identification: understanding the tradeoff between effort and information gain. Plant Methods, 2017, 13, 97.	4.3	80
7	Strategic Traceability for Safety-Critical Projects. IEEE Software, 2013, 30, 58-66.	1.8	77
8	Multi-view classification with convolutional neural networks. PLoS ONE, 2021, 16, e0245230.	2.5	74
9	Plant species classification using flower imagesâ€"A comparative study of local feature representations. PLoS ONE, 2017, 12, e0170629.	2.5	69
10	Traceability in the wild. , 2018, , .		65
11	Do developers benefit from requirements traceability when evolving and maintaining a software system?. Empirical Software Engineering, 2015, 20, 413-441.	3.9	64
12	Traceability Fundamentals. , 2012, , 3-22.		63
13	Preventing Defects: The Impact of Requirements Traceability Completeness on Software Quality. IEEE Transactions on Software Engineering, 2017, 43, 777-797.	5.6	59
14	Towards automated traceability maintenance. Journal of Systems and Software, 2012, 85, 2205-2227.	4.5	54
15	Motivation Matters in the Traceability Trenches. , 2009, , .		52
16	Mind the gap: assessing the conformance of software traceability to relevant guidelines. , 2014, , .		50
17	Combining high-throughput imaging flow cytometry and deep learning for efficient species and life-cycle stage identification of phytoplankton. BMC Ecology, 2018, 18, 51.	3.0	46
18	OmniDet: Surround View Cameras Based Multi-Task Visual Perception Network for Autonomous Driving. IEEE Robotics and Automation Letters, 2021, 6, 2830-2837.	5.1	45

#	Article	IF	Citations
19	Getting back to basics: Promoting the use of a traceability information model in practice. , 2009, , .		43
20	A Survey on Usage Scenarios for Requirements Traceability in Practice. Lecture Notes in Computer Science, 2013, , 158-173.	1.3	42
21	Flowers, leaves or both? How to obtain suitable images for automated plant identification. Plant Methods, 2019, 15, 77.	4.3	42
22	Pollen analysis using multispectral imaging flow cytometry and deep learning. New Phytologist, 2021, 229, 593-606.	7.3	42
23	The Flora Incognita app â€“ Interactive plant species identification. Methods in Ecology and Evolution, 2021, 12, 1335-1342.	5.2	41
24	Image-based classification of plant genus and family for trained and untrained plant species. BMC Bioinformatics, 2019, 20, 4.	2.6	40
25	StickyPillars: Robust and Efficient Feature Matching on Point Clouds using Graph Neural Networks. , 2021, , .		38
26	SynDistNet: Self-Supervised Monocular Fisheye Camera Distance Estimation Synergized with Semantic Segmentation for Autonomous Driving. , 2021, , .		37
27	Assessing the effect of requirements traceability for software maintenance. , 2012, , .		36
28	Design pattern recovery based on annotations. Advances in Engineering Software, 2010, 41, 519-526.	3.8	34
29	Analyzing requirements and traceability information to improve bug localization. , 2018, , .		33
30	FisheyeDistanceNet: Self-Supervised Scale-Aware Distance Estimation using Monocular Fisheye Camera for Autonomous Driving. , 2020, , .		33
31	An empirical study on project-specific traceability strategies. , 2013, , .		30
32	Crowdâ€sourced plant occurrence data provide a reliable description of macroecological gradients. Ecography, 2021, 44, 1131-1142.	4.5	28
33	Rule-Based Maintenance of Post-Requirements Traceability Relations. , 2008, , .		25
34	Flexible design pattern detection based on feature types. , 2011, , .		24
35	Enabling Automated Traceability Maintenance through the Upkeep of Traceability Relations. Lecture Notes in Computer Science, 2009, , 174-189.	1.3	23
36	Deep Learning in Plant Phenological Research: A Systematic Literature Review. Frontiers in Plant Science, 2022, 13, 805738.	3.6	23

#	Article	IF	Citations
37	Enabling Automated Traceability Maintenance by Recognizing Development Activities Applied to Models. , 2008, , .		21
38	A visual language for modeling and executing traceability queries. Software and Systems Modeling, 2013, 12, 537-553.	2.7	21
39	Analyzing closeness of code dependencies for improving IR-based Traceability Recovery. , 2017, , .		21
40	UnRectDepthNet: Self-Supervised Monocular Depth Estimation using a Generic Framework for Handling Common Camera Distortion Models. , 2020, , .		21
41	Flora Capture: a citizen science application for collecting structured plant observations. BMC Bioinformatics, 2020, 21, 576.	2.6	19
42	On the use of a cascaded convolutional neural network for three-dimensional flow measurements using astigmatic PTV. Measurement Science and Technology, 2020, 31, 074015.	2.6	19
43	Can method data dependencies support the assessment of traceability between requirements and source code?. Journal of Software: Evolution and Process, 2015, 27, 838-866.	1.6	17
44	A Visual Traceability Modeling Language. Lecture Notes in Computer Science, 2010, , 226-240.	1.3	16
45	A Taxonomy and Visual Notation for Modeling Globally Distributed Requirements Engineering Projects. , 2010, , .		16
46	Defocus particle tracking: a comparison of methods based on model functions, cross-correlation, and neural networks. Measurement Science and Technology, 2021, 32, 094011.	2.6	16
47	Requirements Traceability across Organizational Boundaries - A Survey and Taxonomy. Lecture Notes in Computer Science, 2013, , 125-140.	1.3	16
48	Variability points and design pattern usage in architectural tactics. , 2012, , .		15
49	A quality model for the systematic assessment of requirements traceability. , 2015, , .		15
50	The SEOSS 33 dataset â€" Requirements, bug reports, code history, and trace links for entire projects. Data in Brief, 2019, 25, 104005.	1.0	15
51	Pattern-based auto-completion of UML modeling activities. , 2014, , .		14
52	traceMaintainer - Automated Traceability Maintenance. , 2008, , .		13
53	SVDistNet: Self-Supervised Near-Field Distance Estimation on Surround View Fisheye Cameras. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 10252-10261.	8.0	13
54	Recommending Auto-completions for Software Modeling Activities. Lecture Notes in Computer Science, 2013, , 170-186.	1.3	13

#	Article	IF	Citations
55	Towards feature-aware retrieval of refinement traces. , 2013, , .		12
56	Achieving lightweight trustworthy traceability. , 2014, , .		12
57	How Firms Adapt and Interact in Open Source Ecosystems: Analyzing Stakeholder Influence and Collaboration Patterns. Lecture Notes in Computer Science, 2016, , 63-81.	1.3	12
58	Development Methodologies for Safety Critical Machine Learning Applications in the Automotive Domain: A Survey. , 2021, , .		12
59	Direct data-driven forecast of local turbulent heat flux in Rayleighâ€“BÃ©nard convection. Physics of Fluids, 2022, 34, .	4.0	12
60	Do software engineers benefit from source code navigation with traceability? — An experiment in software change management. , 2011, , .		11
61	Acquiring Tool Support for Traceability. , 2012, , 43-68.		11
62	Breaking the big-bang practice of traceability: Pushing timely trace recommendations to project stakeholders. , 2012, , .		11
63	The IlmSeven Dataset. , 2017, , .		11
64	Deep security analysis of program code. Empirical Software Engineering, 2022, 27, 1.	3.9	11
65	An integrative environmental pollen diversity assessment and its importance for the Sustainable Development Goals. Plants People Planet, 2022, 4, 110-121.	3.3	11
66	A Customizable Approach to Design Patterns Recognition Based on Feature Types. Arabian Journal for Science and Engineering, 2014, 39, 8851-8873.	1.1	10
67	Efficiently Annotating Object Images with Absolute Size Information Using Mobile Devices. International Journal of Computer Vision, 2019, 127, 207-224.	15.6	10
68	Image-Based Automated Recognition of 31 Poaceae Species: The Most Relevant Perspectives. Frontiers in Plant Science, 2021, 12, 804140.	3.6	10
69	A domain-centric approach for recommending architectural tactics to satisfy quality concerns. , 2013, , .		9
70	Estimating the Implementation Risk of Requirements in Agile Software Development Projects with Traceability Metrics. Lecture Notes in Computer Science, 2015, , 81-97.	1.3	9
71	SmartPIV: flow velocity estimates by smartphones for education and field studies. Experiments in Fluids, 2021, 62, 1.	2.4	9
72	Do data dependencies in source code complement call dependencies for understanding requirements traceability?. , 2012, , .		8

#	Article	IF	Citations
73	Using Frugal User Feedback with Closeness Analysis on Code to Improve IR-Based Traceability Recovery. , 2019, , .		8
74	Evaluation of design pattern recovery tools. Procedia Computer Science, 2011, 3, 813-819.	2.0	7
75	Empirical studies in software and systems traceability. Empirical Software Engineering, 2017, 22, 963-966.	3.9	7
76	Ready-to-Use Traceability on Evolving Projects. , 2012, , 173-194.		6
77	How to Select a Requirements Management Tool: Initial Steps. , 2009, , .		5
78	From Raw Project Data to Business Intelligence. IEEE Software, 2015, 32, 22-25.	1.8	5
79	Use of trace link types in issue tracking systems. , 2018, , .		5
80	Structured information in bug report descriptionsâ€"influence on IR-based bug localization and developers. Software Quality Journal, 2019, 27, 1315-1337.	2.2	5
81	Reactive Auto-Completion of Modeling Activities. IEEE Transactions on Software Engineering, 2021, 47, 1431-1451.	5.6	5
82	Synaptic Scalingâ€"An Artificial Neural Network Regularization Inspired by Nature. IEEE Transactions on Neural Networks and Learning Systems, 2022, 33, 3094-3108.	11.3	5
83	Customizing Traceability Links for the Unified Process. Lecture Notes in Computer Science, 2007, , 53-71.	1.3	5
84	Request for comments. , 2020, , .		5
85	Semi-automated traceability maintenance: An architectural overview of traceMaintainer. , 2009, , .		4
86	Continuous assessment of software traceability. , 2016, , .		4
87	The potential of multispectral imaging flow cytometry for environmental monitoring. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2022, 101, 782-799.	1.5	4
88	Influence of Structured Information in Bug Report Descriptions on IR-Based Bug Localization. , 2018, , .		3
89	Graph Based Mining of Code Change Patterns from Version Control Commits. IEEE Transactions on Software Engineering, 2020, , 1-1.	5.6	3
90	Fine-Tuning Model Transformation: Change Propagation in Context of Consistency, Completeness, and Human Guidance. Lecture Notes in Computer Science, 2011, , 1-14.	1.3	3

#	Article	IF	Citations
91	Propagating frugal user feedback through closeness of code dependencies to improve IR-based traceability recovery. Empirical Software Engineering, 2022, 27, 1.	3.9	3
92	RapMOD â€" In Situ Auto-Completion for Graphical Models. , 2017, , .		2
93	DLR secure software engineering. , 2018, , .		2
94	SpojitR: Intelligently Link Development Artifacts. , 2020, , .		2
95	Selecting Open Source Projects for Traceability Case Studies. Lecture Notes in Computer Science, 2019, , 229-242.	1.3	2
96	SEOSS-Queries - a software engineering dataset for text-to-SQL and question answering tasks. Data in Brief, 2022, 42, 108211.	1.0	1
97	A definition-by-example approach and visual language for activity patterns in engineering disciplines. PLoS ONE, 2020, 15, e0226877.	2.5	0