Jacques Klein

List of Publications by Year
in descending order

143 papers	6,307 citations	304368 22 h-index	189595 50 g-index
145 all docs	145 docs citations	145 times ranked	2512 citing authors

#	Article	IF	Citations
1	What You See is What it Means! Semantic Representation Learning of Code based on Visualization and Transfer Learning. ACM Transactions on Software Engineering and Methodology, 2022, 31, 1-34.	4.8	9
2	On the Suitability of SHAP Explanations for Refining Classifications. , 2022, , .		2
3	DigBugâ€"Pre/post-processing operator selection for accurate bug localization. Journal of Systems and Software, 2022, 189, 111300.	3.3	3
4	Predicting Patch Correctness Based on the Similarity of Failing Test Cases. ACM Transactions on Software Engineering and Methodology, 2022, 31, 1-30.	4.8	9
5	A Deep Dive Inside DREBIN: An Explorative Analysis beyond Android Malware Detection Scores. ACM Transactions on Privacy and Security, 2022, 25, 1-28.	2.2	14
6	Difuzer. , 2022, , .		9
7	JuCify. , 2022, , .		15
8	Rebooting Research on Detecting Repackaged Android Apps: Literature Review and Benchmark. IEEE Transactions on Software Engineering, 2021, 47, 676-693.	4.3	42
9	A critical review on the evaluation of automated program repair systems. Journal of Systems and Software, 2021, 171, 110817.	3.3	36
10	Understanding the Evolution of Android App Vulnerabilities. IEEE Transactions on Reliability, 2021, 70, 212-230.	3.5	23
11	Comparing MultiLingual and Multiple MonoLingual Models for Intent Classification and Slot Filling. Lecture Notes in Computer Science, 2021, , 367-375.	1.0	3
12	Revisiting the VCCFinder approach for the identification of vulnerability-contributing commits. Empirical Software Engineering, 2021, 26, 1.	3.0	6
13	A Comparison of Pre-Trained Language Models for Multi-Class Text Classification in the Financial Domain. , 2021, , .		14
14	A first look at Android applications in Google Play related to COVID-19. Empirical Software Engineering, 2021, 26, 57.	3.0	12
15	A Partial Replication of "RAICC: Revealing Atypical Inter-Component Communication in Android Apps". , 2021, , .		0
16	Taming Reflection. ACM Transactions on Software Engineering and Methodology, 2021, 30, 1-36.	4.8	11
17	A Journey Through Android App Analysis: Solutions and Open Challenges. , 2021, , .		1
18	RAICC: Revealing Atypical Inter-Component Communication in Android Apps. , 2021, , .		21

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19	Lessons Learnt on Reproducibility in Machine Learning Based Android Malware Detection. Empirical Software Engineering, 2021, 26, 1.	3.0	9
20	On the Impact of Sample Duplication in Machine-Learning-Based Android Malware Detection. ACM Transactions on Software Engineering and Methodology, 2021, 30, 1-38.	4.8	29
21	ANCHOR: locating android framework-specific crashing faults. Automated Software Engineering, 2021, 28, 1.	2.2	7
22	Where were the repair ingredients for Defects4j bugs?. Empirical Software Engineering, 2021, 26, 1.	3.0	8
23	DexRay: A Simple, yet Effective Deep Learning Approach to Android Malware Detection Based on Image Representation of Bytecode. Communications in Computer and Information Science, 2021, , 81-106.	0.4	14
24	SmartGift: Learning to Generate Practical Inputs for Testing Smart Contracts. , 2021, , .		8
25	Revisiting Test Cases to Boost Generate-and-Validate Program Repair. , 2021, , .		2
26	FixMiner: Mining relevant fix patterns for automated program repair. Empirical Software Engineering, 2020, 25, 1980-2024.	3.0	94
27	CDA: Characterising Deprecated Android APIs. Empirical Software Engineering, 2020, 25, 2058-2098.	3.0	17
28	Evaluating representation learning of code changes for predicting patch correctness in program repair. , 2020, , .		49
29	MadDroid: Characterizing and Detecting Devious Ad Contents for Android Apps. , 2020, , .		29
30	Borrowing your enemyâ€™s arrows: the case of code reuse in Android via direct inter-app code invocation. , 2020, , .		10
31	On the efficiency of test suite based program repair. , 2020, , .		63
32	Data-driven Simulation and Optimization for Covid-19 Exit Strategies. , 2020, , .		23
33	Evaluating Pretrained Transformer-based Models on the Task of Fine-Grained Named Entity Recognition. , 2020, , .		10
34	Mining Android crash fixes in the absence of issue- and change-tracking systems. , 2019, , .		12
35	iFixR: bug report driven program repair. , 2019, , .		56
36	Negative Results on Mining Crypto-API Usage Rules in Android Apps. , 2019, , .		20

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37	Musti: Dynamic Prevention of Invalid Object Initialization Attacks. IEEE Transactions on Information Forensics and Security, 2019, 14, 2167-2178.	4.5	1
38	You Cannot Fix What You Cannot Find! An Investigation of Fault Localization Bias in Benchmarking Automated Program Repair Systems. , 2019, , .		78
39	Revisiting the impact of common libraries for android-related investigations. Journal of Systems and Software, 2019, 154, 157-175.	3.3	20
40	Should You Consider Adware as Malware in Your Study?. , 2019, , .		12
41	On Identifying and Explaining Similarities in Android Apps. Journal of Computer Science and Technology, 2019, 34, 437-455.	0.9	7
42	On the Evolution of Mobile App Complexity. , 2019, , .		9
43	Handling Duplicates in Dockerfiles Families: Learning from Experts. , 2019, , .		4
44	Automated Testing of Android Apps: A Systematic Literature Review. IEEE Transactions on Reliability, 2019, 68, 45-66.	3.5	109
45	CiD: automating the detection of API-related compatibility issues in Android apps. , 2018, , .		93
46	FraudDroid: automated ad fraud detection for Android apps. , 2018, , .		53
47	MoonlightBox: Mining Android API Histories for Uncovering Release-Time Inconsistencies. , 2018, , .		17
48	Characterising deprecated Android APIs. , 2018, , .		48
49	Feature location benchmark for extractive software product line adoption research using realistic and synthetic Eclipse variants. Information and Software Technology, 2018, 104, 46-59.	3.0	23
50	Towards Estimating and Predicting User Perception on Software Product Variants. Lecture Notes in Computer Science, 2018, , 23-40.	1.0	4
51	Augmenting and structuring user queries to support efficient free-form code search. Empirical Software Engineering, 2018, 23, 2622-2654.	3.0	29
52	F <scp>a</scp> C <scp>o</scp> Y. , 2018, , .		44
53	On vulnerability evolution in Android apps. , 2018, , .		8
54	Understanding Android App Piggybacking: A Systematic Study of Malicious Code Grafting. IEEE Transactions on Information Forensics and Security, 2017, 12, 1269-1284.	4.5	113

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55	Characterizing malicious Android apps by mining topic-specific data flow signatures. Information and Software Technology, 2017, 90, 27-39.	3.0	30
56	Static analysis of android apps: A systematic literature review. Information and Software Technology, 2017, 88, 67-95.	3.0	208
57	SimiDroid: Identifying and Explaining Similarities in Android Apps. , 2017, , .		29
58	Variability Management and Assessment for User Interface Design. Human-computer Interaction Series, 2017, , 81-106.	0.4	7
59	Bottom-Up Technologies for Reuse: Automated Extractive Adoption of Software Product Lines. , 2017, , .		29
60	Impact of tool support in patch construction. , 2017, , .		16
61	Automatically Locating Malicious Packages in Piggybacked Android Apps. , 2017, , .		18
62	Understanding Android App Piggybacking. , 2017, , .		11
63	Euphony: Harmonious Unification of Cacophonous Anti-Virus Vendor Labels for Android Malware. , 2017, , .		49
64	On Locating Malicious Code in Piggybacked Android Apps. Journal of Computer Science and Technology, 2017, 32, 1108-1124.	0.9	21
65	The Multi-Generation Repackaging Hypothesis. , 2017, , .		6
66	Sensing by proxy in buildings with agglomerative clustering of indoor temperature movements. , 2017, , .		2
67	Name suggestions during feature identification. , 2016, , .		18
68	Time Series Classification with Discrete Wavelet Transformed Data. International Journal of Software Engineering and Knowledge Engineering, 2016, 26, 1361-1377.	0.6	17
69	Profiling household appliance electricity usage with N-gram language modeling. , 2016, , .		9
70	Mining families of android applications for extractive SPL adoption. , 2016, , .		15
71	Accessing Inaccessible Android APIs: An Empirical Study. , 2016, , .		32
72	An Investigation into the Use of Common Libraries in Android Apps. , 2016, , .		89

#	Article	IF	Citations
73	AndroZoo. , 2016, , .		361
74	DroidRA: taming reflection to support whole-program analysis of Android apps. , 2016, , .		93
75	Towards a generic framework for automating extensive analysis of Android applications. , 2016, , .		5
76	Reflection-aware static analysis of Android apps. , 2016, , .		20
77	Profiling Android Vulnerabilities. , 2016, , .		19
78	Near real-time electric load approximation in low voltage cables of smart grids with models@run.time. , 2016, , .		2
79	Parameter Values of Android APIs: A Preliminary Study on 100,000 Apps. , 2016, , .		14
80	Combining static analysis with probabilistic models to enable market-scale Android inter-component analysis. , 2016, , .		56
81	Empirical assessment of machine learning-based malware detectors for Android. Empirical Software Engineering, 2016, 21, 183-211.	3.0	99
82	Feature Location Benchmark for Software Families Using Eclipse Community Releases. Lecture Notes in Computer Science, 2016, , 267-283.	1.0	7
83	VCU: The Three Dimensions of Reuse. Lecture Notes in Computer Science, 2016, , 122-137.	1.0	11
84	On the Lack of Consensus in Anti-Virus Decisions: Metrics and Insights on Building Ground Truths of Android Malware. Lecture Notes in Computer Science, 2016, , 142-162.	1.0	23
85	Combining static analysis with probabilistic models to enable market-scale Android inter-component analysis. ACM SIGPLAN Notices, 2016, 51, 469-484.	0.2	15
86	Time Series Classification with Discrete Wavelet Transformed Data: Insights from an Empirical Study. , 2016, , .		13
87	DSCo: A Language Modeling Approach for Time Series Classification. Lecture Notes in Computer Science, 2016, , 294-310.	1.0	6
88	Automating the Extraction of Model-Based Software Product Lines from Model Variants (T). , 2015, , .		47
89	Suspicious electric consumption detection based on multi-profiling using live machine learning. , 2015, , .		7
90	Are Your Training Datasets Yet Relevant?. Lecture Notes in Computer Science, 2015, , 51-67.	1.0	38

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91	Stream my models: Reactive peer-to-peer distributed models@run.time. , 2015, , .		16
92	Bottom-up adoption of software product lines. , 2015, , .		89
93	Beyond discrete modeling: A continuous and efficient model for IoT. , 2015, , .		8
94	SoSPa: A system of Security design Patterns for systematically engineering secure systems. , 2015, , .		8
95	Potential Component Leaks in Android Apps: An Investigation into a New Feature Set for Malware Detection. , 2015, , .		17
96	Adaptive blurring of sensor data to balance privacy and utility for ubiquitous services. , 2015, , .		2
97	ApkCombiner: Combining Multiple Android Apps to Support Inter-App Analysis. IFIP Advances in Information and Communication Technology, 2015, , 513-527.	0.5	52
98	IccTA: Detecting Inter-Component Privacy Leaks in Android Apps. , 2015, , .		258
99	Estimating and Predicting Average Likability on Computer-Generated Artwork Variants. , 2015, , .		5
100	An extensive systematic review on the Model-Driven Development of secure systems. Information and Software Technology, 2015, 68, 62-81.	3.0	58
101	FlowDroid. ACM SIGPLAN Notices, 2014, 49, 259-269.	0.2	801
102	Generating realistic Smart Grid communication topologies based on real-data. , 2014, , .		31
103	A Forensic Analysis of Android Malware -- How is Malware Written and How it Could Be Detected?. , 2014, , .		27
104	Advances in Model-Driven Security. Advances in Computers, 2014, 93, 103-152.	1.2	24
105	Large-scale machine learning-based malware detection. , 2014, , .		15
106	Feature Relations Graphs: A Visualisation Paradigm for Feature Constraints in Software Product Lines. , 2014, , .		23
107	Automatically Exploiting Potential Component Leaks in Android Applications. , 2014, , .		43
108	Modularity and Dynamic Adaptation of Flexibly Secure Systems: Model-Driven Adaptive Delegation in Access Control Management. Lecture Notes in Computer Science, 2014, , 109-144.	1.0	1

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109	FlowDroid. , 2014, , .		659
110	Model-Driven Security with A System of Aspect-Oriented Security Design Patterns. , 2014, , .		9
111	Bypassing the Combinatorial Explosion: Using Similarity to Generate and Prioritize T-Wise Test Configurations for Software Product Lines. IEEE Transactions on Software Engineering, 2014, 40, 650-670.	4.3	159
112	Static Analysis for Extracting Permission Checks of a Large Scale Framework: The Challenges and Solutions for Analyzing Android. IEEE Transactions on Software Engineering, 2014, 40, 617-632.	4.3	62
113	The NOAH Project: Giving a Chance to Threatened Species in Africa with UAVs. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2014, , 198-208.	0.2	5
114	Identifying and Visualising Commonality and Variability in Model Variants. Lecture Notes in Computer Science, 2014, , 117-131.	1.0	22
115	Reactive Security for Smart Grids Using Models@run.time-Based Simulation and Reasoning. Lecture Notes in Computer Science, 2014, , 139-153.	1.0	7
116	A Native Versioning Concept to Support Historized Models at Runtime. Lecture Notes in Computer Science, 2014, , 252-268.	1.0	19
117	Sustainable ICT4D in Africa: Where Do We Go from Here?. Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, 2014, , 95-103.	0.2	3
118	Assessing Software Product Line Testing Via Model-Based Mutation: An Application to Similarity Testing. , 2013, , .		52
119	A Systematic Review of Model-Driven Security. , 2013, , .		18
120	Model-driven adaptive delegation. , 2013, , .		4
121	Got issues? Who cares about it? A large scale investigation of issue trackers from GitHub. , 2013, , .		101
122	Towards automated testing and fixing of re-engineered Feature Models. , 2013, , .		18
123	Multi-objective test generation for software product lines. , 2013, , .		76
124	PLEDGE. , 2013, , .		20
125	Achieving Practical Genericity in Model Weaving through Extensibility. Lecture Notes in Computer Science, 2013, , 108-124.	1.0	8
126	Dexpler. , 2012, , .		153

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127	Building specifications as a domain-specific aspect language. , 2012, , .		4
128	Automatically securing permission-based software by reducing the attack surface: an application to Android. , 2012, , .		95
129	Pairwise testing for software product lines: comparison of two approaches. Software Quality Journal, 2012, 20, 605-643.	1.4	91
130	Comparing Six Modeling Approaches. Lecture Notes in Computer Science, 2012, , 217-243.	1.0	3
131	Towards flexible evolution of Dynamically Adaptive Systems. , 2012, , .		11
132	Model Driven Mutation Applied to Adaptative Systems Testing. , 2011, , .		10
133	Issues in model-driven behavioural product derivation. , 2011, , .		2
134	Aspect-Oriented Model Development at Different Levels of Abstraction. Lecture Notes in Computer Science, 2011, , 361-376.	1.0	2
135	Automated and Scalable T-wise Test Case Generation Strategies for Software Product Lines. , 2010, , .		155
136	Aspect-Oriented Design with Reusable Aspect Models. Lecture Notes in Computer Science, 2010, , 272-320.	1.0	29
137	Flexible Model Element Introduction Policies for Aspect-Oriented Modeling. Lecture Notes in Computer Science, 2010, , 63-77.	1.0	5
138	Reconciling Automation and Flexibility in Product Derivation. , 2008, , .		53
139	Composing Multi-view Aspect Models. , 2008, , .		14
140	A generic weaver for supporting product lines. , 2008, , .		38
141	Weaving Multiple Aspects in Sequence Diagrams. , 2007, , 167-199.		29
142	Semantic-based weaving of scenarios. , 2006, , .		73
143	Merging Scenarios. Electronic Notes in Theoretical Computer Science, 2005, 133, 193-215.	0.9	6