

# Jacques Klein

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9121436/publications.pdf>

Version: 2024-02-01

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	FlowDroid. ACM SIGPLAN Notices, 2014, 49, 259-269.	0.2	801
2	FlowDroid. , 2014, , .		659
3	AndroZoo. , 2016, , .		361
4	IccTA: Detecting Inter-Component Privacy Leaks in Android Apps. , 2015, , .		258
5	Static analysis of android apps: A systematic literature review. Information and Software Technology, 2017, 88, 67-95.	3.0	208
6	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
7	Automated and Scalable T-wise Test Case Generation Strategies for Software Product Lines. , 2010, , .		155
8	Dexpler. , 2012, , .		153
9	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
10	Automated Testing of Android Apps: A Systematic Literature Review. IEEE Transactions on Reliability, 2019, 68, 45-66.	3.5	109
11	Got issues? Who cares about it? A large scale investigation of issue trackers from GitHub. , 2013, , .		101
12	Empirical assessment of machine learning-based malware detectors for Android. Empirical Software Engineering, 2016, 21, 183-211.	3.0	99
13	Automatically securing permission-based software by reducing the attack surface: an application to Android. , 2012, , .		95
14	FixMiner: Mining relevant fix patterns for automated program repair. Empirical Software Engineering, 2020, 25, 1980-2024.	3.0	94
15	DroidRA: taming reflection to support whole-program analysis of Android apps. , 2016, , .		93
16	CiD: automating the detection of API-related compatibility issues in Android apps. , 2018, , .		93
17	Pairwise testing for software product lines: comparison of two approaches. Software Quality Journal, 2012, 20, 605-643.	1.4	91
18	Bottom-up adoption of software product lines. , 2015, , .		89

#	ARTICLE	IF	CITATIONS
19	An Investigation into the Use of Common Libraries in Android Apps. , 2016, , .		89
20	You Cannot Fix What You Cannot Find! An Investigation of Fault Localization Bias in Benchmarking Automated Program Repair Systems. , 2019, , .		78
21	Multi-objective test generation for software product lines. , 2013, , .		76
22	Semantic-based weaving of scenarios. , 2006, , .		73
23	On the efficiency of test suite based program repair. , 2020, , .		63
24	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
25	An extensive systematic review on the Model-Driven Development of secure systems. Information and Software Technology, 2015, 68, 62-81.	3.0	58
26	Combining static analysis with probabilistic models to enable market-scale Android inter-component analysis. , 2016, , .		56
27	iFixR: bug report driven program repair. , 2019, , .		56
28	Reconciling Automation and Flexibility in Product Derivation. , 2008, , .		53
29	FraudDroid: automated ad fraud detection for Android apps. , 2018, , .		53
30	Assessing Software Product Line Testing Via Model-Based Mutation: An Application to Similarity Testing. , 2013, , .		52
31	ApkCombiner: Combining Multiple Android Apps to Support Inter-App Analysis. IFIP Advances in Information and Communication Technology, 2015, , 513-527.	0.5	52
32	Euphony: Harmonious Unification of Cacophonous Anti-Virus Vendor Labels for Android Malware. , 2017, , .		49
33	Evaluating representation learning of code changes for predicting patch correctness in program repair. , 2020, , .		49
34	Characterising deprecated Android APIs. , 2018, , .		48
35	Automating the Extraction of Model-Based Software Product Lines from Model Variants (T). , 2015, , .		47
36	F <sc>a</sc> C <sc>o</sc> Y. , 2018, , .		44

#	ARTICLE	IF	CITATIONS
37	Automatically Exploiting Potential Component Leaks in Android Applications. , 2014, , .		43
38	Rebooting Research on Detecting Repackaged Android Apps: Literature Review and Benchmark. IEEE Transactions on Software Engineering, 2021, 47, 676-693.	4.3	42
39	A generic weaver for supporting product lines. , 2008, , .		38
40	Are Your Training Datasets Yet Relevant?. Lecture Notes in Computer Science, 2015, , 51-67.	1.0	38
41	A critical review on the evaluation of automated program repair systems. Journal of Systems and Software, 2021, 171, 110817.	3.3	36
42	Accessing Inaccessible Android APIs: An Empirical Study. , 2016, , .		32
43	Generating realistic Smart Grid communication topologies based on real-data. , 2014, , .		31
44	Characterizing malicious Android apps by mining topic-specific data flow signatures. Information and Software Technology, 2017, 90, 27-39.	3.0	30
45	SimiDroid: Identifying and Explaining Similarities in Android Apps. , 2017, , .		29
46	Bottom-Up Technologies for Reuse: Automated Extractive Adoption of Software Product Lines. , 2017, , .		29
47	Augmenting and structuring user queries to support efficient free-form code search. Empirical Software Engineering, 2018, 23, 2622-2654.	3.0	29
48	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
49	Weaving Multiple Aspects in Sequence Diagrams. , 2007, , 167-199.		29
50	Aspect-Oriented Design with Reusable Aspect Models. Lecture Notes in Computer Science, 2010, , 272-320.	1.0	29
51	MadDroid: Characterizing and Detecting Devious Ad Contents for Android Apps. , 2020, , .		29
52	A Forensic Analysis of Android Malware – How is Malware Written and How it Could Be Detected?. , 2014, , .		27
53	Advances in Model-Driven Security. Advances in Computers, 2014, 93, 103-152.	1.2	24
54	Feature Relations Graphs: A Visualisation Paradigm for Feature Constraints in Software Product Lines. , 2014, , .		23

#	ARTICLE	IF	CITATIONS
55	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
56	Understanding the Evolution of Android App Vulnerabilities. IEEE Transactions on Reliability, 2021, 70, 212-230.	3.5	23
57	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
58	Data-driven Simulation and Optimization for Covid-19 Exit Strategies. , 2020, , .		23
59	Identifying and Visualising Commonality and Variability in Model Variants. Lecture Notes in Computer Science, 2014, , 117-131.	1.0	22
60	On Locating Malicious Code in Piggybacked Android Apps. Journal of Computer Science and Technology, 2017, 32, 1108-1124.	0.9	21
61	RAICC: Revealing Atypical Inter-Component Communication in Android Apps. , 2021, , .		21
62	PLEDGE. , 2013, , .		20
63	Reflection-aware static analysis of Android apps. , 2016, , .		20
64	Negative Results on Mining Crypto-API Usage Rules in Android Apps. , 2019, , .		20
65	Revisiting the impact of common libraries for android-related investigations. Journal of Systems and Software, 2019, 154, 157-175.	3.3	20
66	Profiling Android Vulnerabilities. , 2016, , .		19
67	A Native Versioning Concept to Support Historized Models at Runtime. Lecture Notes in Computer Science, 2014, , 252-268.	1.0	19
68	A Systematic Review of Model-Driven Security. , 2013, , .		18
69	Towards automated testing and fixing of re-engineered Feature Models. , 2013, , .		18
70	Name suggestions during feature identification. , 2016, , .		18
71	Automatically Locating Malicious Packages in Piggybacked Android Apps. , 2017, , .		18
72	Potential Component Leaks in Android Apps: An Investigation into a New Feature Set for Malware Detection. , 2015, , .		17

#	ARTICLE	IF	CITATIONS
73	Time Series Classification with Discrete Wavelet Transformed Data. International Journal of Software Engineering and Knowledge Engineering, 2016, 26, 1361-1377.	0.6	17
74	MoonlightBox: Mining Android API Histories for Uncovering Release-Time Inconsistencies. , 2018, , .		17
75	CDA: Characterising Deprecated Android APIs. Empirical Software Engineering, 2020, 25, 2058-2098.	3.0	17
76	Stream my models: Reactive peer-to-peer distributed models@run.time. , 2015, , .		16
77	Impact of tool support in patch construction. , 2017, , .		16
78	Large-scale machine learning-based malware detection. , 2014, , .		15
79	Mining families of android applications for extractive SPL adoption. , 2016, , .		15
80	Combining static analysis with probabilistic models to enable market-scale Android inter-component analysis. ACM SIGPLAN Notices, 2016, 51, 469-484.	0.2	15
81	JuCify. , 2022, , .		15
82	Composing Multi-view Aspect Models. , 2008, , .		14
83	Parameter Values of Android APIs: A Preliminary Study on 100,000 Apps. , 2016, , .		14
84	A Comparison of Pre-Trained Language Models for Multi-Class Text Classification in the Financial Domain. , 2021, , .		14
85	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
86	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
87	Time Series Classification with Discrete Wavelet Transformed Data: Insights from an Empirical Study. , 2016, , .		13
88	Mining Android crash fixes in the absence of issue- and change-tracking systems. , 2019, , .		12
89	Should You Consider Adware as Malware in Your Study?. , 2019, , .		12
90	A first look at Android applications in Google Play related to COVID-19. Empirical Software Engineering, 2021, 26, 57.	3.0	12

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91	Towards flexible evolution of Dynamically Adaptive Systems. , 2012, , .		11
92	Understanding Android App Piggybacking. , 2017, , .		11
93	Taming Reflection. ACM Transactions on Software Engineering and Methodology, 2021, 30, 1-36.	4.8	11
94	VCU: The Three Dimensions of Reuse. Lecture Notes in Computer Science, 2016, , 122-137.	1.0	11
95	Model Driven Mutation Applied to Adaptative Systems Testing. , 2011, , .		10
96	Borrowing your enemy's arrows: the case of code reuse in Android via direct inter-app code invocation. , 2020, , .		10
97	Evaluating Pretrained Transformer-based Models on the Task of Fine-Grained Named Entity Recognition. , 2020, , .		10
98	Model-Driven Security with A System of Aspect-Oriented Security Design Patterns. , 2014, , .		9
99	Profiling household appliance electricity usage with N-gram language modeling. , 2016, , .		9
100	On the Evolution of Mobile App Complexity. , 2019, , .		9
101	Lessons Learnt on Reproducibility in Machine Learning Based Android Malware Detection. Empirical Software Engineering, 2021, 26, 1.	3.0	9
102	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
103	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
104	Difuzer. , 2022, , .		9
105	Beyond discrete modeling: A continuous and efficient model for IoT. , 2015, , .		8
106	SoSPa: A system of Security design Patterns for systematically engineering secure systems. , 2015, , .		8
107	On vulnerability evolution in Android apps. , 2018, , .		8
108	Where were the repair ingredients for Defects4j bugs?. Empirical Software Engineering, 2021, 26, 1.	3.0	8

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109	Achieving Practical Genericity in Model Weaving through Extensibility. Lecture Notes in Computer Science, 2013, , 108-124.	1.0	8
110	SmartGift: Learning to Generate Practical Inputs for Testing Smart Contracts. , 2021, , .		8
111	Suspicious electric consumption detection based on multi-profiling using live machine learning. , 2015, , .		7
112	Variability Management and Assessment for User Interface Design. Human-computer Interaction Series, 2017, , 81-106.	0.4	7
113	On Identifying and Explaining Similarities in Android Apps. Journal of Computer Science and Technology, 2019, 34, 437-455.	0.9	7
114	ANCHOR: locating android framework-specific crashing faults. Automated Software Engineering, 2021, 28, 1.	2.2	7
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	Feature Location Benchmark for Software Families Using Eclipse Community Releases. Lecture Notes in Computer Science, 2016, , 267-283.	1.0	7
117	Merging Scenarios. Electronic Notes in Theoretical Computer Science, 2005, 133, 193-215.	0.9	6
118	The Multi-Generation Repackaging Hypothesis. , 2017, , .		6
119	Revisiting the VCCFinder approach for the identification of vulnerability-contributing commits. Empirical Software Engineering, 2021, 26, 1.	3.0	6
120	DSCo: A Language Modeling Approach for Time Series Classification. Lecture Notes in Computer Science, 2016, , 294-310.	1.0	6
121	Estimating and Predicting Average Likability on Computer-Generated Artwork Variants. , 2015, , .		5
122	Towards a generic framework for automating extensive analysis of Android applications. , 2016, , .		5
123	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
124	Flexible Model Element Introduction Policies for Aspect-Oriented Modeling. Lecture Notes in Computer Science, 2010, , 63-77.	1.0	5
125	Building specifications as a domain-specific aspect language. , 2012, , .		4
126	Model-driven adaptive delegation. , 2013, , .		4



#	ARTICLE	IF	CITATIONS
127	Towards Estimating and Predicting User Perception on Software Product Variants. Lecture Notes in Computer Science, 2018, , 23-40.	1.0	4
128	Handling Duplicates in Dockerfiles Families: Learning from Experts. , 2019, , .		4
129	Comparing Six Modeling Approaches. Lecture Notes in Computer Science, 2012, , 217-243.	1.0	3
130	Comparing MultiLingual and Multiple MonoLingual Models for Intent Classification and Slot Filling. Lecture Notes in Computer Science, 2021, , 367-375.	1.0	3
131	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
132	DigBugâ€™Pre/post-processing operator selection for accurate bug localization. Journal of Systems and Software, 2022, 189, 111300.	3.3	3
133	Adaptive blurring of sensor data to balance privacy and utility for ubiquitous services. , 2015, , .		2
134	Near real-time electric load approximation in low voltage cables of smart grids with models@run.time. , 2016, , .		2
135	Issues in model-driven behavioural product derivation. , 2011, , .		2
136	Aspect-Oriented Model Development at Different Levels of Abstraction. Lecture Notes in Computer Science, 2011, , 361-376.	1.0	2
137	Sensing by proxy in buildings with agglomerative clustering of indoor temperature movements. , 2017, , .		2
138	Revisiting Test Cases to Boost Generate-and-Validate Program Repair. , 2021, , .		2
139	On the Suitability of SHAP Explanations for Refining Classifications. , 2022, , .		2
140	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
141	Musti: Dynamic Prevention of Invalid Object Initialization Attacks. IEEE Transactions on Information Forensics and Security, 2019, 14, 2167-2178.	4.5	1
142	A Journey Through Android App Analysis: Solutions and Open Challenges. , 2021, , .		1
143	A Partial Replication of "RAICC: Revealing Atypical Inter-Component Communication in Android Apps". , 2021, , .		0