## References

 $[ACL^+20]$ 

 $[AAF^+14]$ Domenico Amalfitano, Nicola Amatucci, Anna Rita Fasolino, Ugo Gentile, Gianluca Mele, Roberto Nardone, Valeria Vittorini, and Stefano Marrone. Improving code coverage in android apps testing by exploiting patterns and automatic test case generation. pages 29–34. Association for Computing Machinery, Inc, 2014. cited By 7; Conference of 2014 ACM International Workshop on Long-Term Industrial Collaboration on Software Engineering, WISE 2014 -Co-located with ASE 2014; Conference Date: 16 September 2014 Through 16 September 2014; Conference Code:114556. [AAFT16] Domenico Amalfitano, Nicola Amatucci, Anna Rita Fasolino, and Porfirio Tramontana. A conceptual framework for the comparison of fully automated gui testing techniques. pages 50-57. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 4; Conference of 30th IEEE/ACM International Conference on Automated Software Engineering Workshops, ASEW 2015; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:119822. [AAK11] Izzat Mahmoud Alsmadi and Mohammed Naji Al-Kabi. Gui structural metrics. International Arab Journal of Information Technology, 8(2):124-129, 2011. cited By 6. [AB04] Johan S. Andersson and Geoff Bache. The video store revisited yet again: Adventures in gui acceptance testing. International Conference on Extreme Programming and Agile Processes in Software Engineering, XP, 3092:1-10, 2004. cited By 22; Conference of 5th International Conference on Extreme Programming and Agile Processes in Software Engineering, XP 2004; Conference Date: 6 June 2004 Through 10 June 2004; Conference Code:126499. [ABB15] Emil Alégroth, Geoff Bache, and Emily Bache. On the industrial applicability of texttest: An empirical case study. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 0; Conference of 8th IEEE International Conference on Software Testing, Verification and Validation, ICST 2015; Conference Date: 13 April 2015 Through 17 April 2015; Conference Code:112251. [ABK18] David Adamo, Reńee C. Bryce, and Tariq M. King. Randomized event sequence generation strategies for automated testing of android apps. International Conference on Information Technology: New Generations, 558:571-578, 2018. cited By 1; Conference of 14th International Conference on Information Technology - New Generations, ITNG 2017; Conference Date: 10 April 2017 Through 12 April 2017; Conference Code:195369. [ABS11] Stephan Arlt, Cristiano Bertolini, and Martin Schäf. Behind the scenes: An approach to incorporate context in gui test case generation. pages 222-231, Berlin, 2011. cited By 9; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2011; Conference Date: 21

March 2011 Through 25 March 2011; Conference Code:86023.

Luca Ardito, Ricardo Coppola, Simone Leonardi, Maurizio Morisio, and Ugo A. Buy. Automated test selection for android apps based on apk and activity classification.  $IEEE\ Access$ , 8:187648–187670, 2020. cited By 0.

[ACMT19]

Luca Ardito, Ricardo Coppola, Maurizio Morisio, and Marco Torchiano. Espresso vs. eyeautomate: An experiment for the comparison of two generations of android gui testing. pages 13–22. Association for Computing Machinery, 2019. cited By 9; Conference of 23rd Evaluation and Assessment in Software Engineering Conference, EASE 2019; Conference Date: 14 April 2019 Through 17 April 2019; Conference Code:147277.

[ACTA18]

Luca Ardito, Ricardo Coppola, Marco Torchiano, and Emil Alégroth. Towards automated translation between generations of gui-based tests for mobile devices. pages 46–53. Association for Computing Machinery, Inc, 2018. cited By 5; Conference of 2018 International Symposium on Software Testing and Analysis, IS-STA 2018; Conference Date: 16 July 2018 Through 21 July 2018; Conference Code:143972.

 $[ADJ^+11]$ 

Shay Artzi, Julian Dolby, Simon Holm Jensen, Anders Møller, and Frank Tip. A framework for automated testing of javascript web applications. pages 571–580, Waikiki, Honolulu, HI, 2011. cited By 130; Conference of 33rd International Conference on Software Engineering, ICSE 2011; Conference Date: 21 May 2011 Through 28 May 2011; Conference Code:85380.

 $[AEA^+10]$ 

Rauf Abdul, Naveed Ejaz, Qamar Abbas, Shafiq Ur Rehman, and Arshad Ali Shahid. Pso based test coverage analysis for event driven software. pages 219–224, Chengdu, 2010. cited By 0; Conference of International Conference on Software Engineering and Data Mining, SEDM; Conference Date: 23 June 2010 Through 25 June 2010; Conference Code:81677.

[AEAMR16]

Francisco Almenar, Anna I. Esparcia-Alcazar, Mirella Martínez, and Urko Rueda. Automated testing of web applications with testar: Lessons learned testing the odoo tool. *International Symposium on Search Based Software Engineering, SSBSE*, 9962 LNCS:218–223, 2016. cited By 4; Conference of 8th International Symposium on Search Based Software Engineering, SSBSE 2016; Conference Date: 8 October 2016 Through 10 October 2016; Conference Code:184659.

[AF14]

Emil Alégroth and Robert Feldt. *Industrial application of visual GUI testing: Lessons learned*, volume 9783319112831. Springer International Publishing, 2014. cited By 6.

[AF17]

Emil Alégroth and Robert Feldt. On the long-term use of visual gui testing in industrial practice: a case study. *Empirical Software Engineering*, 22(6):2937–2971, 2017. cited By 13.

[AFK16]

Emil Alégroth, Robert Feldt, and Pirjo Kolström. Maintenance of automated test suites in industry: An empirical study on visual gui testing. *Information and Software Technology*, 73:66–80, 2016. cited By 26.

[AFO13]

Emil Alégroth, Robert Feldt, and Helena Holmström Olsson. Transitioning manual system test suites to automated testing: An industrial case study. pages 56–65, Luxembourg, 2013. cited By 19; Conference of IEEE 6th International Conference on Software

Testing, Verification and Validation, ICST 2013; Conference Date: 18 May 2013 Through 20 May 2013; Conference Code:98979. Emil Alégroth, Robert Feldt, and Lisa Ryrholm. Visual gui testing in practice: challenges, problemsand limitations. *Empirical* 

Software Engineering, 20(3):694–744, 2015. cited By 20.

Domenico Amalfitano, Anna Rita Fasolino, and Porfirio Tramontana. Techniques and tools for rich internet applications testing. pages 63–72, Timisoara, 2010. cited By 13; Conference of 12th IEEE International Symposium on Web Systems Evolution, WSE 2010; Conference Date: 17 September 2010 Through 18 September 2010: Conference Code:82869.

Domenico Amalfitano, Anna Rita Fasolino, and Porfirio Tramontana. A gui crawling-based technique for android mobile application testing. pages 252–261, Berlin, 2011. cited By 137; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:86023.

Domenico Amalfitano, Anna Rita Fasolino, Porfirio Tramontana, Salvatore de Carmine, and Gennaro Imparato. A toolset for gui testing of android applications. pages 650–653, Riva del Garda, Trento, 2012. cited By 38; Conference of 28th International Conference on Software Maintenance, ICSM 2012; Conference Date: 23 September 2012 Through 28 September 2012; Conference Code: 95267.

Domenico Amalfitano, Anna Rita Fasolino, Porfirio Tramontana, Salvatore de Carmine, and Atif M. Memon. Using gui ripping for automated testing of android applications. pages 258–261, Essen, 2012. cited By 343; Conference of 2012 27th IEEE/ACM International Conference on Automated Software Engineering, ASE 2012; Conference Date: 3 September 2012 Through 7 September 2012; Conference Code:92925.

Domenico Amalfitano, Anna Rita Fasolino, Porfirio Tramontana, Bryan Dzung Ta, and Atif M. Memon. Mobiguitar: Automated model-based testing of mobile apps. *IEEE Software*, 32(5):53–59, 2015. cited By 186.

Domenico Amalfitano, Anna Rita Fasolino, Porfirio Tramontana, and Nicola Amatucci. Considering context events in event-based testing of mobile applications. pages 126–133, Luxembourg, 2013. cited By 57; Conference of IEEE 6th International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2013; Conference Date: 18 March 2013 Through 20 March 2013; Conference Code:99045.

Jonatan Alava, Tariq M. King, and Peter J. Clarke. Automatic validation of java page flows using model-based coverage criteria. volume 1, pages 439–446, Chicago, IL, 2006. cited By 2; Conference of 30th Annual International Computer Software and Applications Conference, COMPSAC 2006; Conference Date: 17 September 2006 Through 21 September 2006; Conference Code:69546.

[AFT11]

[AFR15]

[AFT10]

 $[AFT^+12a]$ 

 $[AFT^+12b]$ 

 $[AFT^{+}15]$ 

 $[{\rm AFTA13}]$ 

[AKC06]

[AKIN07]

M. Assem, Arabi El Said Keshk, Nabil A. Ismail, and Hamed M. Nassar. Specification-driven automated testing of java swing guis using xml. pages 84–88, Cairo, 2007. IEEE Computer Society. cited By 3; Conference of 2007 ITI 5th International Conference on Information and Communications Technology, ICICT 2007; Conference Date: 16 December 2007 Through 18 December 2007; Conference Code:73011.

[AKKB18]

David Adamo, Md Khorrom Khan, Sreedevi Koppula, and Renee C. Bryce. Reinforcement learning for android gui testing. pages 2–8. Association for Computing Machinery, Inc. 2018. cited By 8; Conference of 9th ACM SIGSOFT International Workshop on Automating TEST Case Design, Selection, and Evaluation, A-TEST 2018, co-located the 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2018; Conference Date: 5 November 2018; Conference Code:144660.

[AKR18]

Emil Alégroth, Arvid Karlsson, and Alexander Radway. Continuous integration and visual gui testing: Benefits and drawbacks in industrial practice. pages 172-181. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 5; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation, ICST 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference Code:136754.

[AKRR14]

Pekka Aho, Teemu Kanstrén, Tomi D. Räty, and Juha J. R246;ning. Automated extraction of gui models for testing. Advances in Computers, 95:49-112, 2014. cited By 6.

[Als08]

Izzat Mahmoud Alsmadi. The utilization of user sessions in testing. pages 581–585, Portland, OR, 2008. cited By 6; Conference of 7th IEEE/ACIS International Conference on Computer and Information Science, IEEE/ACIS ICIS 2008; Conference Date: 14 May 2008 Through 16 May 2008; Conference Code:73174.

[Als10]

Izzat Mahmoud Alsmadi. Using genetic algorithms for test case generation and selection optimization. Calgary, AB, 2010. cited By 6; Conference of 2010 23rd 2010 23rd Canadian Conference on Electrical and Computer Engineering, CCECE 2010, CCECE 2010 ; Conference Date: 2 May 2010 Through 5 May 2010; Conference Code:82048.

[Als11]

Izzat Mahmoud Alsmadi. Activities and trends in testing graphical user interfaces automatically. Journal of Software Engineering, 5(1):1-19, 2011. cited By 3.

[Als13a]

Izzat Mahmoud Alsmadi. How much automation can be done in testing?, volume 4-4. IGI Global, 2013. cited By 1.

[Als13b]

Izzat Mahmoud Alsmadi. Using mutation to enhance gui testing coverage. IEEE Software, 30(1):67-73, 2013. cited By 4.

[Al3]

Emil Alégroth. Random visual gui testing: Proof of concept. volume 2013-January, pages 178-183. Knowledge Systems Institute Graduate School, 2013. cited By 5; Conference of 25th International Conference on Software Engineering and Knowledge Engineering, SEKE 2013; Conference Date: 27 June 2013 Through 29 June 2013; Conference Code:112836.

[AM07] Izzat Mahmoud Alsmadi and Kenneth I. Magel. Gui path oriented test case generation. pages 21–28, Orlando, FL, 2007. cited By 3; Conference of 2007 International Conference on Software Engineering Theory and Practice, SETP 2007; Conference Date: 9 July 2007 Through 12 July 2007; Conference Code:97028. [AMAG14] Ankita, Aakriti Mittal, Himanshi Arora, and Sonia Gupta. Ameliorating the image matching algorithm of sikuli using artificial neural networks. International Journal of Applied Engineering Research, 9(24):23591-23600, 2014. cited By 0. [AMB18] Amira Ali, Huda A. Maghawry, and Nagwa L. Badr. Automated parallel gui testing as a service for mobile applications. Journal of Software: Evolution and Process, 30(10), 2018. cited By 2. [AMM15] Christoffer Quist Adamsen, Gianluca Mezzetti, and Anders Møller. Systematic execution of android test suites in adverse conditions. pages 83–93. Association for Computing Machinery, Inc., 2015. cited By 53; Conference of 24th International Symposium on Software Testing and Analysis, ISSTA 2015; Conference Date: 13 July 2015 Through 17 July 2015; Conference Code:117924. [AMR11] Pekka Aho, Nadja Menz, and Tomi D. Räty. Enhancing generated java gui models with valid test data. pages 310-315, Langkawi, 2011. IEEE Computer Society. cited By 7; Conference of 2nd IEEE International Conference on Open Systems, ICOS 2011; Conference Date: 25 September 2011 Through 28 September 2011; Conference Code:87606. [AMRS11] Pekka Aho, Nadja Menz, Tomi D. Räty, and Ina Schieferdecker. Automated java gui modeling for model-based testing purposes. pages 268-273. IEEE Computer Society, 2011. cited By 21. [AMRZ11] G. Appasami, V. K. Mohan Raj, and Muhammad Zubair. Automated testing of silverlight and moonlight applications. pages 49-54, Perundurai, Erode, 2011. cited By 0; Conference of National Conference on Innovations in Emerging Technology, NCOIET'11 ; Conference Date: 17 February 2011 Through 18 February 2011; Conference Code:84555. Tanzirul Azim and Iulian Neamtiu. Targeted and depth-first ex-[AN13] ploration for systematic testing of android apps. pages 641–660, Indianapolis, IN, 2013. cited By 158; Conference of 2013 28th ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOPSLA 2013; Conference Date: 29 October 2013 Through 31 October 2013; Conference Code:100913. [ANHY12] Saswat Anand, Mayur Naik, Mary Jean Harrold, and Hongseok Yang. Automated concolic testing of smartphone apps. Cary, NC, 2012. cited By 231; Conference of 20th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, FSE 2012; Conference Date: 11 November 2012 Through 16 November 2012; Conference Code:94505. [ANKS16] Yauhen Leanidavich Arnatovich, Minh Ngoc Ngo, Tan Hee Beng

Kuan, and Charlie Soh. Achieving high code coverage in android ui testing via automated widget exercising. volume 0, pages 193–200. IEEE Computer Society, 2016. cited By 9; Conference of

23rd Asia-Pacific Software Engineering Conference, APSEC 2016 ; Conference Date: 6 December 2016 Through 9 December 2016; Conference Code:127157. [ANO13] Emil Alégroth, Michel Nass, and Helena Holmström Olsson. Jautomate: A tool for system- and acceptance-test automation. pages 439-446, Luxembourg, 2013. cited By 33; Conference of IEEE 6th International Conference on Software Testing, Verification and Validation, ICST 2013; Conference Date: 18 May 2013 Through 20 May 2013; Conference Code:98979. [ANPB18] David Adamo, Dmitry Nurmuradov, Shraddha Piparia, and Renee C. Bryce. Combinatorial-based event sequence testing of android applications. Information and Software Technology, 99:98-117, 2018. cited By 10. [AOA05] Anneliese Amschler Andrews, Jeff Offutt, and Roger T. Alexander. Testing web applications by modeling with fsms. Software and Systems Modeling, 4(3):326–345, 2005. cited By 227.  $[APB^+12]$ Stephan Arlt, Andreas Podelski, Cristiano Bertolini, Martin Schäf, Ishan Banerjee, and Atif M. Memon. Lightweight static analysis for gui testing. pages 301-310, Dallas, TX, 2012. cited By 39; Conference of 2012 IEEE 23rd International Symposium on Software Reliability Engineering, ISSRE 2012; Conference Date: 27 November 2012 Through 30 November 2012; Conference Code:96616. [APR19] Sérgio Almeida, Ana C.R. Paiva, and André Restivo. Mutationbased web test case generation. International Conference on the Quality of Information and Communications Technology, QUATIC, 1010:339-346, 2019. cited By 1; Conference of 12th International Conference on the Quality of Information and Communications Technology, QUATIC 2019; Conference Date: 11 September 2019 Through 13 September 2019; Conference Code:231459. [APW14] Stephan Arlt, Andreas Podelski, and Martin Wehrle. Reducing gui test suites via program slicing. pages 270-281. Association for Computing Machinery, Inc, 2014. cited By 15; Conference of 23rd International Symposium on Software Testing and Analysis, ISSTA 2014; Conference Date: 21 July 2014 Through 25 July 2014; Conference Code:113465.  $[ARA^+19]$ Domenico Amalfitano, Vincenzo Riccio, Nicola Amatucci, Vincenzo De Simone, and Anna Rita Fasolino. Combining automated gui exploration of android apps with capture and replay through machine learning. Information and Software Technology, 105:95-116, 2019. cited By 9. [ARM13] Pekka Aho, Tomi D. Räty, and Nadja Menz. Dynamic reverse engineering of gui models for testing. pages 441-447, Hammamet, 2013. cited By 10; Conference of 2013 International Conference on Control, Decision and Information Technologies, CoDIT 2013 ; Conference Date: 6 May 2013 Through 8 May 2013; Conference Code:102418. [AS16] Aiman Ayyal Awwad and Wolfgang Slaný. Automated bidirec-

tional languages localization testing for android apps with rich gui. *Mobile Information Systems*, 2016, 2016. cited By 9.

[ASB16]

Filipe Arruda, Augusto C.A. Sampaio, and Flávia De Almeida Barros. Capture replay with text-based reuse and framework agnosticism. volume 2016-January, pages 420–425. Knowledge Systems Institute Graduate School, 2016. cited By 6; Conference of 28th International Conference on Software Engineering and Knowledge Engineering, SEKE 2016; Conference Date: 1 July 2016 Through 3 July 2016; Conference Code:123620.

[ASKIN07]

Mohamed A. Abdel Salam, Arabi El Said Keshk, Nabil A. Ismail, and Hamed M. Nassar. Automated testing of java menu-based guis using xml visual editor. pages 313–318, Cairo, 2007. cited By 5; Conference of 2007 International Conference on Computer Engineering and Systems, ICCES'07; Conference Date: 27 November 2007 Through 29 November 2007; Conference Code:73259.

[ASKM13]

Pekka Aho, Matias Suarez, Teemu Kanstrén, and Atif M. Memon. Industrial adoption of automatically extracted gui models for testing. volume 1078, pages 49–54. CEUR-WS, 2013. cited By 6; Conference of 3rd International Workshop on Experiences and Empirical Studies in Software Modeling, EESSMod 2013 - Co-located with 16th International Conference on Model Driven Engineering Languages and Systems, MoDELS 2013; Conference Date: 1 October 2013; Conference Code:111113.

[ASKM14]

Pekka Aho, Matias Suarez, Teemu Kanstrén, and Atif M. Memon. Murphy tools: Utilizing extracted gui models for industrial software testing. pages 343–348, Cleveland, OH, 2014. IEEE Computer Society. cited By 13; Conference of 7th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2014; Conference Date: 31 March 2014 Through 4 April 2014; Conference Code:105862.

[ASM16]

Emil Alégroth, Marcello Steiner, and Antonio Martini. Exploring the presence of technical debt in industrial gui-based testware: A case study. pages 257–262. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 5; Conference of 9th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2016; Conference Date: 10 April 2016 Through 15 April 2016; Conference Code:123151.

[ASMK15]

Pekka Aho, Matias Suarez, Atif M. Memon, and Teemu Kanstrén. Making gui testing practical: Bridging the gaps. pages 439–444. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 8; Conference of 12th International Conference on Information Technology: New Generations, ITNG 2015; Conference Date: 13 April 2015 Through 15 April 2015; Conference Code:112541.

[AV18]

Pekka Aho and Tanja E.J. Vos. Challenges in automated testing through graphical user interface. pages 118–121. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 4; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference Code:138044.

[AVA+19]

Pekka Aho, Tanja E.J. Vos, Sami Ahonen, Tomi Piirainen, Perttu Moilanen, and Fernando Pastor Ricós. Continuous piloting of an open source test automation tool in an industrial environment.

Sistedes, 2019. cited By 1; Conference of 24th Jornadas de Ingenieria del Software y Bases de Datos, JISBD 2019 - 24th Conference on Software Engineering and Data Bases, JISBD 2019; Conference Date: 2 September 2019 Through 4 September 2019; Conference Code:159521.

Yauhen Leanidavich Arnatovich, Lipo Wang, Ngoc Minh Ngo, and

[AWNS18]

Yauhen Leanidavich Arnatovich, Lipo Wang, Ngoc Minh Ngo, and Charlie Soh. Mobolic: An automated approach to exercising mobile application guis using symbiosis of online testing technique and customated input generation. *Software - Practice and Experience*, 48(5):1107–1142, 2018. cited By 3.

[AZEG12]

Samer Al-Zain, Derar Eleyan, and Joy Garfield. Automated user interface testing for web applications and testcomplete. pages 350–354, Pune, Maharashtra, 2012. cited By 3; Conference of International Information Technology Conference, CUBE 2012; Conference Date: 3 September 2012 Through 5 September 2012; Conference Code:93757.

[AZJH11]

Andrea Adamoli, Dmitrijs Zaparanuks, Milan Jović, and Matthias Hauswirth. Automated gui performance testing. *Software Quality Journal*, 19(4):801–839, 2011. cited By 23.

[Bau13]

Sebastian Bauersfeld. Guidiff - a regression testing tool for graphical user interfaces. pages 499–500, Luxembourg, 2013. cited By 6; Conference of IEEE 6th International Conference on Software Testing, Verification and Validation, ICST 2013; Conference Date: 18 May 2013 Through 20 May 2013; Conference Code: 98979.

[BB05]

Fevzi Belli and Christof J. Budnik. Towards self-testing of component-based software. volume 2, pages 205–210, Edinburgh, Scotland, 2005. cited By 4; Conference of 29th Annual International Computer Software and Applications Conference, COMP-SAC 2005; Conference Date: 26 July 2005 Through 28 July 2005; Conference Code:68524.

[BB14]

Emily Bache and Geoff Bache. Specification by example with guitests - how could that work? *International Conference on Extreme Programming and Agile Processes in Software Engineering, XP*, 179 LNBIP:320–326, 2014. cited By 4; Conference of 15th International Conference on Agile Software Development, XP 2014; Conference Date: 26 May 2014 Through 30 May 2014; Conference Code:106498.

[BB16]

Young-min Baek and Doohwan Bae. Automated model-based android gui testing using multi-level gui comparison criteria. pages 238–249. Association for Computing Machinery, Inc, 2016. cited By 77; Conference of 31st IEEE/ACM International Conference on Automated Software Engineering, ASE 2016; Conference Date: 3 September 2016 Through 7 September 2016; Conference Code:123481.

[BBH06]

Fevzi Belli, Christof J. Budnik, and Axel Hollmann. Holistic testing of interactive systems using statecharts. volume P-77, pages 345–356, Magdeburg, 2006. cited By 0; Conference of SICHER-HEIT 2006 - Sicherheit - Schutz und Zuverlassigkeit, Beitrage der 3. Jahrestagung des Fachbereichs Sicherheit der Gesellschaft für Informatik e.V. (GI)- 3rd Annual Conference of the Dep. of

Security of the Society for Informatics - Security; Conference Date: 20 February 2006 Through 22 February 2006; Conference Code:95736.

[BBM12]

Fevzi Belli, Mutlu Beyazıt, and Atif M. Memon. Testing is an event-centric activity. pages 198–206, Gaithersburg, MD, 2012. cited By 17; Conference of 2012 IEEE 6th International Conference on Software Security and Reliability Companion, SERE-C 2012; Conference Date: 20 June 2012 Through 22 June 2012; Conference Code: 92958.

[BBSZ16]

Yi Bie, Sheng Bin, Gengxin Sun, and Xicheng Zhou. An empirical analysis of android apps bug and automated testing approach for android apps. *International Journal of Multimedia and Ubiquitous Engineering*, 11(9):1–10, 2016. cited By 1.

[BBW06]

Fevzi Belli, Christof J. Budnik, and Lee James White. Event-based modelling, analysis and testing of user interactions: Approach and case study. *Software Testing Verification and Reliability*, 16(1):3–32, 2006. cited By 78.

[BCCR14]

Abhijeet Banerjee, Lee Kee Chong, Sudipta Chattopadhyay, and Abhik Roychoudhury. Detecting energy bugs and hotspots in mobile apps. volume 16-21-November-2014, pages 588–598. Association for Computing Machinery, 2014. cited By 114; Conference of 22nd ACM SIGSOFT International Symposium on the Foundations of Software Engineering, FSE 2014; Conference Date: 16 November 2014 Through 21 November 2014; Conference Code:109032.

[BCJ1]

Paweł Brach, Jacek Chrzaszcz, Janusz Jabłonowski, and Jakub Światły. Cartographer: Architecture of a distributed system for automated gui map generation. volume 1, pages 761–766, Kowloon, 2011. cited By 0; Conference of International MultiConference of Engineers and Computer Scientists 2011, IMECS 2011; Conference Date: 16 March 2011 Through 18 March 2011; Conference Code:85583.

[Bel01]

Fevzi Belli. Finite state testing and analysis of graphical user interfaces. pages 34–43, Hong Kong, 2001. cited By 146; Conference of 12th International Symposium on Software Reliability Engineering; Conference Date: 27 November 2001 Through 30 November 2001; Conference Code:58982.

[BF12]

Emil Börjesson and Robert Feldt. Automated system testing using visual gui testing tools: A comparative study in industry. pages 350–359, Montreal, QC, 2012. cited By 44; Conference of 5th IEEE International Conference on Software Testing, Verification and Validation, ICST 2012; Conference Date: 17 April 2012 Through 21 April 2012; Conference Code: 90301.

[BGZ18]

Nataniel P. Borges, María Gómez, and Andreas Zeller. Guiding app testing with mined interaction models. pages 133–143. IEEE Computer Society, 2018. cited By 9; Conference of 5th ACM/IEEE 5th International Conference on Mobile Software Engineering and Systems, MOBILESoft 2018, collocated with the 40th International Conference on Software Engineering, ICSE 2018

; Conference Date: 27 May 2018 Through 28 May 2018; Conference Code: 138321.

[Bil15]

Martin Billes. Race-driven ui-level test generation for javascript-based web applications. pages 81–82. Association for Computing Machinery, Inc, 2015. cited By 1; Conference of ACM SIGPLAN International Conference on Systems, Programming, Languages and Applications: Software for Humanity, SPLASH 2015; Conference Date: 25 October 2015 Through 30 October 2015; Conference Code:117451.

[BK19]

Hendrik Bünder and Herbert Kuchen. A model-driven approach for behavior-driven gui testing. volume Part F147772, pages 1742–1751. Association for Computing Machinery, 2019. cited By 0; Conference of 34th Annual ACM Symposium on Applied Computing, SAC 2019; Conference Date: 8 April 2019 Through 12 April 2019; Conference Code:147772.

[BLBS10]

Fevzi Belli, Michael Linschulte, Christof J. Budnik, and Harald A. Stieber. Fault detection likelihood of test sequence length. pages 402–411, Paris, 2010. cited By 3; Conference of 3rd International Conference on Software Testing, Verification and Validation, ICST 2010; Conference Date: 7 April 2010 Through 9 April 2010; Conference Code:81067.

[BM07]

Penelope A. Brooks and Atif M. Memon. Automated gui testing guided by usage profiles. pages 333–342, Atlanta, GA, 2007. cited By 78; Conference of 22nd IEEE/ACM International Conference on Automated Software Engineering, ASE'07; Conference Date: 5 November 2007 Through 9 November 2007; Conference Code:80761.

[BM10]

Cristiano Bertolini and Alexandre Cabral Mota. A framework for gui testing based on use case design. pages 252–259, Paris, 2010. cited By 5; Conference of 3rd International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2010; Conference Date: 6 April 2010 Through 10 April 2010; Conference Code:80675.

[BMAF10]

Cristiano Bertolini, Alexandre Cabral Mota, Eduardo Aranha, and Cristiano Ferraz. Gui testing techniques evaluation by designed experiments. pages 235–244, Paris, 2010. cited By 10; Conference of 3rd International Conference on Software Testing, Verification and Validation, ICST 2010; Conference Date: 7 April 2010 Through 9 April 2010; Conference Code:81067.

[BMRS12]

Giovanni Becce, Leonardo Mariani, Oliviero Riganelli, and Mauro Santoro. Extracting widget descriptions from guis. *International Conference on Fundamental Approaches to Software Engineering, FASE*, 7212 LNCS:347–361, 2012. cited By 12; Conference of 15th International Conference on Fundamental Approaches to Software Engineering, FASE 2012, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2012; Conference Date: 24 March 2012 Through 1 April 2012; Conference Code:89253.

[BMS98]

Armin Beer, Stefan Mohacsi, and Christian Stary. Idatg: an open tool for automated testing of interactive software. pages 470–

475, Vienna, Austria, 1998. IEEE Comp Soc, Los Alamitos, CA, United States. cited By 8; Conference of Proceedings of the 1998 IEEE 22nd Annual International Computer Software Applications Conference; Conference Date: 19 August 1998 Through 21 August 1998; Conference Code: 49277.

[BMSAR17]

Fachrul Pralienka Bani Muhamad, Riyanarto Sarno, Adhatus Solichah Ahmadiyah, and Siti Rochimah. Visual gui testing in continuous integration environment. pages 214–219. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 1; Conference of 2016 International Conference on Information and Communication Technology and Systems, ICTS 2016; Conference Date: 12 October 2016; Conference Code:127474.

[BMVD09]

Cor Paul Bezemer, Ali Mesbah, and Arie Van Van Deursen. Automated security testing of web widget interactions. pages 81–90, Amsterdam, 2009. cited By 27; Conference of Joint 12th European Software Engineering Conference and 17th ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC-FSE'09; Conference Date: 24 August 2009 Through 28 August 2009; Conference Code:79503.

[BO18a]

Farnaz Behrang and Alessandro Orso. Poster: Automated test migration for mobile apps. pages 384–385. IEEE Computer Society, 2018. cited By 10; Conference of 40th ACM/IEEE International Conference on Software Engineering, ICSE 2018; Conference Date: 27 May 2018 Through 3 June 2018; Conference Code:137351.

[BO18b]

Farnaz Behrang and Alessandro Orso. Test migration for efficient large-scale assessment of mobile app coding assignments. pages 164–175. Association for Computing Machinery, Inc, 2018. cited By 6; Conference of 27th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2018; Conference Date: 16 July 2018 Through 21 July 2018; Conference Code:138042.

[BO19]

Farnaz Behrang and Alessandro Orso. Test migration between mobile apps with similar functionality. pages 54–65. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 7; Conference of 34th IEEE/ACM International Conference on Automated Software Engineering, ASE 2019; Conference Date: 10 November 2019 Through 15 November 2019; Conference Code:156781.

[BO20a]

Farnaz Behrang and Alessandro Orso. Apptestmigrator: A tool for automated test migration for android apps \*. pages 17–20. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 42nd ACM/IEEE International Conference on Software Engineering: Companion, ICSE-Companion 2020; Conference Date: 27 June 2020 Through 19 July 2020; Conference Code:165567.

[BO20b]

Farnaz Behrang and Alessandro Orso. Seven reasons why: An indepth study of the limitations of random test input generation for android. pages 1066–1077. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 35th IEEE/ACM International Conference on Automated Software Engineering,

ASE 2020; Conference Date: 22 September 2020 Through 25 September 2020; Conference Code:166082. [Bor17] Nataniel P. Borges. Data flow oriented ui testing: Exploiting data flows and ui elements to test android applications. pages 432-435. Association for Computing Machinery, Inc, 2017. cited By 3; Conference of 26th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2017; Conference Date: 10 July 2017 Through 14 July 2017; Conference Code:128773. [BP10] Anton A. Bykau and I. I. Piletsky. Internet applications testing automation through probabilistic-network programming. pages 362–365, St. Petersburg, 2010. cited By 0; Conference of IEEE East-West Design and Test Symposium, EWDTS'10; Conference Date: 17 September 2010 Through 20 September 2010; Conference Code:84788. [BPC11] Ana Barbosa, Ana C.R. Paiva, and José Creisssac Campos. Test case generation from mutated task models. pages 175–184, Pisa, 2011. cited By 14; Conference of 3rd ACM SIGCHI Symposium on Engineering Interactive Computing Systems, EICS'11; Conference Date: 13 June 2011 Through 16 June 2011; Conference Code:85412. [BPDM09] Cristiano Bertolini, Glaucia Peres, Marcelo Damorim, and Alexandre Cabral Mota. An empirical evaluation of automated black-box testing techniques for crashing guis. pages 21-30, Denver, CO, 2009. cited By 11; Conference of 2nd International Conference on Software Testing, Verification, and Validation, ICST 2009; Conference Date: 1 April 2009 Through 4 April 2009; Conference Code:76415. [BR09] Judy Bowen and Steve Reeves. Ui-design driven model-based testing. Electronic Communications of the EASST, 22, 2009. cited By [BR13] Judy Bowen and Steve Reeves. Ui-design driven model-based testing. Innovations in Systems and Software Engineering, 9(3):201– 215, 2013. cited By 8. [BRB12] Gigon Bae, Gregg Rothermel, and Doohwan Bae. On the relative strengths of model-based and dynamic event extraction-based gui testing techniques: An empirical study. pages 181-190, Dallas, TX, 2012. cited By 11; Conference of 2012 IEEE 23rd International Symposium on Software Reliability Engineering, ISSRE 2012; Conference Date: 27 November 2012 Through 30 November 2012; Conference Code:96616. [BRB14] Gigon Bae, Gregg Rothermel, and Doohwan Bae. Comparing model-based and dynamic event-extraction based gui testing techniques: An empirical study. Journal of Systems and Software, 97:15-46, 2014. cited By 11. [BRRSP05] Jean Berstel, Stefano Crespi Reghizzi, Gilles Roussel, and Pierluigi San Pietro. A scalable formal method for design and automatic checking of user interfaces. ACM Transactions on Software Engineering and Methodology, 14(2):124–167, 2005. cited By 26. [BRZ20] Nataniel P. Borges, Jenny Rau, and Andreas Zeller. ing up gui testing by on-device test generation. pages 13401343. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 35th IEEE/ACM International Conference on Automated Software Engineering, ASE 2020; Conference Date: 22 September 2020 Through 25 September 2020; Conference Code:166082.

[BS91]

A. Birjandi and S. Sydorowicz. Validation of motif graphical user interface widget set. volume 2, pages 102–103. IEEE Computer Society, 1991. cited By 0; Conference of 24th Annual Hawaii International Conference on System Sciences, HICSS 1991; Conference Date: 8 January 1991 Through 11 January 1991; Conference Code:146842.

[BSV07]

Christof J. Budnik, Rajesh Subramanyan, and Marlon E.R. Vieira. Industrial requirements to benefit from test automation tools for gui testing. volume 2, pages 410–414, Bremen, 2007. cited By 0; Conference of 37th Jahrestagung der Gesellschaft fur Informatik e.V. (GI): Informatik Trifft Logistik, INFORMATIK 2007 37th Annual Conference of the German Informatics Society (GI): Computer Science Meets Logistics, INFORMATIK 2007; Conference Date: 24 September 2007 Through 27 September 2007; Conference Code:95687.

[Bur14]

Miroslav Bures. Change detection system for the maintenance of automated testing. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 8763:192–197, 2014. cited By 1.

[BV12]

Sebastian Bauersfeld and Tanja E.J. Vos. Guitest: A java library for fully automated gui robustness testing. pages 330–333, Essen, 2012. cited By 18; Conference of 2012 27th IEEE/ACM International Conference on Automated Software Engineering, ASE 2012; Conference Date: 3 September 2012 Through 7 September 2012; Conference Code:92925.

[BV14]

Sebastian Bauersfeld and Tanja E.J. Vos. User interface level testing with testar; what about more sophisticated action specification and selection? volume 1354, pages 60–78. CEUR-WS, 2014. cited By 10; Conference of 7th Seminar on Advanced Techniques and Tools for Software Evolution, SATToSE 2014; Conference Date: 9 July 2014 Through 11 July 2014; Conference Code:112061.

 $[BVC^+14]$ 

Sebastian Bauersfeld, Tanja E.J. Vos, Nelly Condori, Alessandra Bagnato, and Etienne Brosse. Evaluating the testar tool in an industrial case study. IEEE Computer Society, 2014. cited By 10; Conference of 8th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement, ESEM, ESEM 2014; Conference Date: 18 September 2014 Through 19 September 2014; Conference Code:108081.

[BWW11a]

Sebastian Bauersfeld, Stefan Wappler, and Joachim Wegener. An approach to automatic input sequence generation for gui testing using ant colony optimization. pages 251–252, Dublin, 2011. cited By 8; Conference of 13th Annual Genetic and Evolutionary Computation Conference, GECCO'11; Conference Date: 12 July 2011 Through 16 July 2011; Conference Code:86136.

[DWW/111.]	Calculation Demonsful Chaffer Warmley and Leading Warmer A
[BWW11b]	Sebastian Bauersfeld, Stefan Wappler, and Joachim Wegener. A metaheuristic approach to test sequence generation for applications with a gui. <i>International Symposium on Search Based Soft-</i>
	ware Engineering, SSBSE, 6956 LNCS:173–187, 2011. cited By 16; Conference of 3rd International Symposium on Search-Based Software Engineering, SSBSE 2011; Conference Date: 10 September
[Bö12]	2011 Through 12 September 2011; Conference Code:86491. Emil Börjesson. Industrial applicability of visual gui testing for system and acceptance test automation. pages 475–478, Montreal,
	QC, 2012. cited By 1; Conference of 5th IEEE International Conference on Software Testing, Verification and Validation, ICST
	2012; Conference Date: 17 April 2012 Through 21 April 2012; Conference Code:90301.
[CA15]	Santo Carino and James H. Andrews. Evaluating the effect of test case length on gui test suite performance. pages 13–17. Institute of Electrical and Electronics Engineers Inc., 2015. cited By
	2; Conference of 10th International Workshop on Automation of Software Test, AST 2015; Conference Date: 23 May 2015 Through
[CA16]	24 May 2015; Conference Code:115697. Santo Carino and James H. Andrews. Dynamically testing guis
[]	using ant colony optimization. pages 138–148. Institute of Electri-
	cal and Electronics Engineers Inc., 2016. cited By 8; Conference of 30th IEEE/ACM International Conference on Automated Soft-
	ware Engineering, ASE 2015; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:118982.
[CA18]	Luís Cruz and Rui Abreu. Measuring the energy footprint of
	mobile testing frameworks. pages 400–401. IEEE Computer Society, 2018. cited By 4; Conference of 40th ACM/IEEE Inter-
	national Conference on Software Engineering, ICSE 2018; Con-
	ference Date: 27 May 2018 Through 3 June 2018; Conference Code:137351.
$[CAG^+12]$	Santo Carino, James H. Andrews, Sheldon Goulding, Pradeepan
	Arunthavarajah, Tony Florio, and Jakub Hertyk. Blackhorse: Creating smart test cases from brittle recorded tests. pages 89–95,
	Zurich, 2012. cited By 1; Conference of 2012 7th International
	Workshop on Automation of Software Test, AST 2012; Conference Date: 2 June 2012 Through 3 June 2012; Conference Code:91305.
$[CAG^+14]$	Santo Carino, James H. Andrews, Sheldon Goulding, Pradeepan
	Arunthavarajah, Tony Florio, and Jakub Hertyk. Blackhorse: Creating smart test cases from brittle recorded tests. <i>Software Quality</i>
[CAMT20]	Journal, 22(2):293–310, 2014. cited By 4. Ricardo Coppola, Luca Ardito, Maurizio Morisio, and Marco
	Torchiano. Mobile testing: New challenges and perceived diffi-
	culties from developers of the italian industry. <i>IT Professional</i> , 22(5):32–39, 2020. cited By 1.
[CAT19]	Ricardo Coppola, Luca Ardito, and Marco Torchiano. Fragility of layout-based and visual gui test scripts: An assessment study on a hybrid mobile application. pages 28–34. Association for Computing Machinery, Inc, 2019. cited By 1; Conference of 10th
	ACM SIGSOFT International Workshop on Automating TEST

Case Design, Selection, and Evaluation, A-TEST 2019, co-located with the 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2019 : Conference Date: 26 August 2019 Through 27 August 2019; Conference Code:154996. [CATA20] Ricardo Coppola, Luca Ardito, Marco Torchiano, and Emil Alégroth. Translation from visual to layout-based android test cases: A proof of concept. pages 74-83. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 13th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2020; Conference Date: 23 March 2020 Through 27 March 2020; Conference Code:162282. [CBAA16] Lazaro Clapp, Osbert Bastani, Saswat Anand, and Alex S. Aiken. Minimizing gui event traces. volume 13-18-November-2016, pages 422–434. Association for Computing Machinery, 2016. cited By 22; Conference of 24th ACM SIGSOFT International Symposium on Foundations of Software Engineering, FSE 2016; Conference Date: 13 November 2016 Through 18 November 2016; Conference Code:124602. [CBNL08] Hao Chen, Zou Beiji, Bian Naizheng, and Pan Lili. A reusable component-based library for gui regression testing, pages 326–329, Adelaide, 2008. cited By 0; Conference of 1st International Workshop on Knowledge Discovery and Data Mining, WKDD; Conference Date: 23 January 2008 Through 24 January 2008; Conference Code:73057. [CCYW16] Lin Cheng, Jialiang Chang, Zijiang James Yang, and Chao Wang. Guicat: Gui testing as a service. pages 858–863. Association for Computing Machinery, Inc, 2016. cited By 8; Conference of 31st IEEE/ACM International Conference on Automated Software Engineering, ASE 2016; Conference Date: 3 September 2016 Through 7 September 2016; Conference Code:123481. [CDKP94] David M. Cohen, Siddhartha R. Dalal, A. Kajla, and Gardner C. Patton. Automatic efficient test generator (aetg) system. pages 303-309, Monterey, CA, USA, 1994. IEEE, Los Alamitos, CA, United States. cited By 82; Conference of Proceedings of the 4th International Symposium on Software Reliability Engineering ; Conference Date: 6 November 1994 Through 9 November 1994; Conference Code:42399. [CDMM20] Diego Clerissi, Giovanni Denaro, Marco Mobilio, and Leonardo Mariani. Plug the database play with automatic testing: Improving system testing by exploiting persistent data. pages 66-77. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 35th IEEE/ACM International Conference on Automated Software Engineering, ASE 2020; Conference Date: 22 September 2020 Through 25 September 2020; Conference Code:166082.  $[CDV^+20]$ Hatim Chahim, Mehmet Duran, Tanja E.J. Vos, Pekka Aho, and Nelly Condori. Scriptless testing at the gui level in an industrial

setting. 14th International Conference on Research Challenges in Information Sciences, RCIS 2020, 385 LNBIP:267-284, 2020.

cited By 1; Conference of 14th International Conference on Research Challenges in Information Sciences, RCIS 2020; Conference Date: 23 September 2020 Through 25 September 2020; Conference Code:241489.  $[CDY^+19]$ Chun Cao, Jing Deng, Ping Yu, Zhiyong Duan, and Xiaoxing Ma. Paraaim: Testing android applications parallel at activity granularity. volume 1, pages 81-90. IEEE Computer Society, 2019. cited By 1; Conference of 43rd IEEE Annual Computer Software and Applications Conference, COMPSAC 2019; Conference Date: 15 July 2019 Through 19 July 2019; Conference Code:151742.  $[CFM^+16]$ José Creisssac Campos, Camille Favollas, Célia Martinie, David Navarre, Philippe A. Palanque, and Miguel Pinto. Systematic automation of scenario-based testing of user interfaces. pages 138-148. Association for Computing Machinery, Inc, 2016. cited By 15; Conference of 8th ACM SIGCHI Symposium on Engineering Interactive Computing Systems, EICS 2016; Conference Date: 21 June 2016 Through 24 June 2016; Conference Code:122402.  $[CGG^+18]$ Chun Cao, Hongjun Ge, Tianxiao Gu, Jing Deng, Ping Yu, and Jian Lü. Accelerating automated android gui exploration with widgets grouping. volume 2018-December, pages 268-277. IEEE Computer Society, 2018. cited By 0; Conference of 25th Asia-Pacific Software Engineering Conference, APSEC 2018; Conference Date: 4 December 2018 Through 7 December 2018; Conference Code:148344.  $[CGH^+07]$ Kevin M. Conroy, Mark Grechanik, Matthew Hellige, Edy S. Liongosari, and Qing Xie. Automatic test generation from gui applications for testing web services. pages 345–354, Paris, 2007. cited By 13; Conference of 23rd International Conference on Software Maintenance, ICSM; Conference Date: 2 October 2007 Through 5 October 2007; Conference Code:72623. [CGO16] Shauvik Roy Choudhary, Alessandra Gorla, and Alessandro Orso. Automated test input generation for android: Are we there yet? pages 429-440. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 245; Conference of 30th IEEE/ACM International Conference on Automated Software Engineering, ASE 2015 ; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:118982. [Cha11] Tsunghsiang Chang. Using graphical representation of user interfaces as visual references. pages 27–30, Santa Barbara, CA, 2011. cited By 6; Conference of 24th Annual ACM Symposium on User Interface Software and Technology, UIST 2011; Conference Date: 16 October 2011 Through 19 October 2011; Conference [CHAS20] Raiyan Rahman Chowdhury, Syeda Sumbul Hossain, Yeasir Arafat, and Bushrat Jahan Siddiqui. Configuring appium for ios applications and test automation in multiple devices. pages 63–69. Association for Computing Machinery, 2020. cited By 0; Conference of 2020 Asia Service Sciences and Software Engineering Conference, ASSE 2020; Conference Date: 13 May 2020 Through 15 May 2020; Conference Code:161557.

[CHGD18]

Jia Chen, Ge Han, Shanqing Guo, and Wenrui Diao. Fragdroid: Automated user interface interaction with activity and fragment analysis in android applications. pages 398–409. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 3; Conference of 48th Annual IEEE/IFIP International Conference on Dependable Systems and Networks, DSN 2018; Conference Date: 25 June 2018 Through 28 June 2018; Conference Code:138141.

[CHM12]

Myra B. Cohen, Si Huang, and Atif M. Memon. Autoinspec: Using missing test coverage to improve specifications in guis. pages 251–260, Dallas, TX, 2012. cited By 9; Conference of 2012 IEEE 23rd International Symposium on Software Reliability Engineering, ISSRE 2012; Conference Date: 27 November 2012 Through 30 November 2012; Conference Code:96616.

[CKS20]

Hoyeol Chae, Ryangkyung Kang, and Ho-sik Seok. Unsupervised detection of changes in usage-phases of a mobile app. *Applied Sciences (Switzerland)*, 10(10), 2020. cited By 0.

[CL19]

Edward T.H. Chu and Junyan Lin. Automated gui testing for android news applications. pages 14–17. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 0; Conference of 4th International Symposium on Computer, Consumer and Control, IS3C 2018; Conference Date: 6 December 2018 Through 8 December 2018; Conference Code:145500.

 $[CLS^+09]$ 

Vivien Chinnapongse, Insup Lee, Oleg V. Sokolsky, Shaohui Wang, and Paul L. Jones. Model-based testing of gui-driven applications. 7th IFIP WG 10.2 International Workshop on Software Technologies for Embedded and Ubiquitous Systems, SEUS 2009, 5860 LNCS:203–214, 2009. cited By 15; Conference of 7th IFIP WG 10.2 International Workshop on Software Technologies for Embedded and Ubiquitous Systems, SEUS 2009; Conference Date: 16 November 2009 Through 18 November 2009; Conference Code:83037.

 $[CMG^+17]$ 

Chun Cao, Chenglin Meng, Hongjun Ge, Ping Yu, and Xiaoxing Ma. Xdroid: Testing android apps with dependency injection. volume 1, pages 214–223. IEEE Computer Society, 2017. cited By 2; Conference of 41st IEEE Annual Computer Software and Applications Conference, COMPSAC 2017; Conference Date: 4 July 2017 Through 8 July 2017; Conference Code:130854.

[CMJRE19]

Jesús Chacón-Montero, Andrés Jiménez-Ramírez, and J. G. Enríquez. Towards a method for automated testing in robotic process automation projects. pages 42–47. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 5; Conference of 14th IEEE/ACM International Workshop on Automation of Software Test, AST 2019; Conference Date: 27 May 2019; Conference Code:151737.

[CMT17]

Ricardo Coppola, Maurizio Morisio, and Marco Torchiano. Scripted gui testing of android apps: A study on diffusion, evolution and fragility. pages 22–32. Association for Computing Machinery, 2017. cited By 10; Conference of 13th International Conference on Predictive Models and Data Analytics in Software Engineering, PROMISE 2017; Conference Date: 8 November 2017; Conference Code:138752.

[CMT18] Ricardo Coppola, Maurizio Morisio, and Marco Torchiano. Maintenance of android widget-based gui testing: A taxonomy of test case modification causes. pages 151–158. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 4; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference Code:138044. [CMT19] Ricardo Coppola, Maurizio Morisio, and Marco Torchiano. Mobile gui testing fragility: A study on open-source android applications. IEEE Transactions on Reliability, 68(1):67–90, 2019. cited By 10. [CMTA19] Ricardo Coppola, Maurizio Morisio, Marco Torchiano, and Luca Ardito. Scripted gui testing of android open-source apps: evolution of test code and fragility causes. Empirical Software Engineering, 2019. cited By 7. [CNS13] Wontae Choi, George C. Necula, and Koushik Sen. Guided gui testing of android apps with minimal restart and approximate learning. pages 623-639, Indianapolis, IN, 2013. cited By 129; Conference of 2013 28th ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOPSLA 2013; Conference Date: 29 October 2013 Through 31 October 2013; Conference Code:100913. [CPN14] Pedro Costa, Ana C.R. Paiva, and Miguel Nabuco. Pattern based gui testing for mobile applications. pages 66-74. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 27; Conference of 9th International Conference on the Quality of Information and Communications Technology, QUATIC 2014; Conference Date: 23 September 2014 Through 26 September 2014; Conference Code:109826. [CPN20] Alexandre Canny, Philippe A. Palanque, and David Navarre. Model-based testing of gui applications featuring dynamic instanciation of widgets. pages 95–104. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 13th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2020; Conference Date: 23 March 2020 Through 27 March 2020; Conference Code:162282.  $[CPS^+17]$ Chunfu Chen, Marco Pistoia, Conglei Shi, Paolo Girolami, Joseph W. Ligman, and Yong Wang. Ui x-ray: Interactive mobile ui testing based on computer vision. pages 245-255. Association for Computing Machinery, 2017. cited By 3; Conference of 22nd International Conference on Intelligent User Interfaces, IUI 2017; Conference Date: 13 March 2017 Through 16 March 2017; Conference Code:126745. [CPSFA10] Marco Cunha, Ana C.R. Paiva, Hugo Sereno Ferreira, and Rui Abreu. Pettool: A pattern-based gui testing tool. volume 1, pages V1202-V1206, San Juan, PR, 2010. cited By 15; Conference of 2010 2nd International Conference on Software Technology and Engineering, ICSTE 2010; Conference Date: 3 October 2010 Through 5 October 2010; Conference Code:82725. [CRT16] Ricardo Coppola, Emanuele Raffero, and Marco Torchiano. Au-

tomated mobile ui test fragility: An exploratory assessment study

on android. pages 11–20. Association for Computing Machinery, Inc, 2016. cited By 11; Conference of 2nd International Workshop on User Interface Test Automation, INTUITEST 2016, co-located with the International Symposium on Software Testing and Analysis, ISSTA 2016; Conference Date: 21 July 2016; Conference Code:138896. Jessica Chen and Suganthan Subramaniam. A gui environment to manipulate fsms for testing gui-based applications in java. page 286, Maui, HI, 2001. cited By 17; Conference of 34th Annual

[CS01]

Hawaii International Conference on System Sciences; Conference Date: 3 January 2001 Through 6 January 2001; Conference Code:58187.

[CS02]

Jessica Chen and Suganthan Subramaniam. Specification-based testing for gui-based applications. Software Quality Journal, 10(3):205–224, 2002. cited By 22.

[CS10]

Woei Kae Chen and Zhengwen Shen. Gui test-case generation with macro-event contracts. pages 145-151, Chengdu, 2010. cited By 2; Conference of International Conference on Software Engineering and Data Mining, SEDM; Conference Date: 23 June 2010 Through 25 June 2010; Conference Code:81677.

[CSC08]

Woei Kae Chen, Zhengwen Shen, and Cheming Chang. Gui test script organization with component abstraction. pages 128-134, Yokohama, 2008. cited By 8; Conference of 2nd IEEE International Conference on Secure System Integration and Reliability Improvement, SSIRI 2008; Conference Date: 14 July 2008 Through 17 July 2008; Conference Code:73531.

[CSH11]

Kuanchun Chuang, ChiSheng Shih, and Shih-Hao Hung. User behavior augmented software testing for user-centered gui. pages 200-208, Miami, FL, 2011. cited By 2; Conference of 2011 ACM Research in Applied Computation Symposium, RACS 2011; Conference Date: 2 November 2011 Through 5 November 2011; Conference Code:88626.

[CSHL19]

Tianxiang Chen, Tao Song, Shusheng He, and Alei Liang. A guibased automated test system for android applications. 2nd International Conference on Computer, Communication and Computational Sciences, IC4S 2017, 760:517-524, 2019. cited By 0; Conference of 2nd International Conference on Computer, Communication and Computational Sciences, IC4S 2017; Conference Date: 11 October 2017 Through 12 October 2017; Conference Code:217109.

[CSMZ14]

Shengbo Chen, Dashen Sun, Huaikou Miao, and Hongwei Zeng. Modeling and testing of guis using iolts. volume 1, pages 35– 42. IEEE Computer Society, 2014. cited By 0; Conference of 21st Asia-Pacific Software Engineering Conference, APSEC 2014; Conference Date: 1 December 2014 Through 4 December 2014; Conference Code:116806.

[CSNW18]

Wontae Choi, Koushik Sen, George C. Necula, and Wenyu Wang. Detreduce: Minimizing android gui test suites for regression testing. volume 2018-January. IEEE Computer Society, 2018. cited By 5; Conference of 40th International Conference on Software Engineering, ICSE 2018; Conference Date: 27 May 2018 Through 3 June 2018; Conference Code:137142. Laurent Capocchi, Jean François Santucci, and Timothée Ville. Software test automation using devsimpy environment. pages 343–348, Montreal, QC, 2013. cited By 1; Conference of 2013 ACM SIGSIM Conference on Principles of Advanced Discrete Simulation, SIGSIM-PADS 2013; Conference Date: 19 May 2013 Through 22 May 2013; Conference Code:97323. Marina Cernat, Adelina Nicoleta Staicu, and Alin Ştefănescu. Improving ui test automation using robotic process automation. pages 260–272. SciTePress, 2020. cited By 1; Conference of 15th International Conference on Software Technologies, ICSOFT 2020 ; Conference Date: 7 July 2020 Through 9 July 2020; Conference Code:162155. Selem Charfi, Abdelwaheb Trabelsi, Houcine Ezzedine, and Christophe Kolski. A user-oriented test environment based on user-interface evaluation graphical controls. volume 12, pages 497-504, Las Vegas, NV, 2013. cited By 2; Conference of 12th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and

[CTHH13] Ashley Colley, Piiastiina Tikka, Jussi Huhtala, and Jonna Häkkilä. Investigating text legibility in mobile ui - a case study comparing automated vs. user study based evaluation. pages 304-306, Tampere, 2013. cited By 1; Conference of 17th International Academic MindTrek Conference: ""Making Sense of Converging Media"", MindTrek 2013; Conference Date: 1 October 2013 Through 4 Oc-

tober 2013; Conference Code:102046.

Rosanna Cassino, Maurizio Tucci, Giuliana Vitiello, and Rita Francese. Empirical validation of an automatic usability evaluation method. Journal of Visual Languages and Computing, 28:1-22, 2015. cited By 19.

Evaluation of Human - Machine Systems, HMS 2013; Conference Date: 11 August 2013 Through 14 August 2013; Conference

Woei Kae Chen and Jungchi Wang. Bad smells and refactoring methods for gui test scripts. pages 289–294, Kyoto, 2012. cited By 9; Conference of 13th ACIS International Conference on Software Engineering, Artificial Intelligence, Networking, and Parallel/Distributed Computing, SNPD 2012; Conference Date: 8 August 2012 Through 10 August 2012; Conference Code:93472.

Nana Chang, Linzhang Wang, Yu Pei, Subrota Kumar Mondal, and Xuandong Li. Change-based test script maintenance for android apps. pages 215–225. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 10; Conference of 18th IEEE International Conference on Software Quality, Reliability, and Security, QRS 2018; Conference Date: 16 July 2018 Through 20 July 2018; Conference Code:138432.

Taolun Chai, Zibing Wang, and Jiaxin Wang. Automated universal testing and tutoring system forweb application. pages 188–192, Beijing, 2009. cited By 0; Conference of 2009 2nd IEEE International Conference on Computer Science and Information Technol-

[CSV13]

[CS0]

[CTEK13]

[CTVF15]

[CW12]

 $[CWP^+18]$ 

[CWW09]

ogy, ICCSIT 2009; Conference Date: 8 August 2009 Through 11 August 2009; Conference Code: 78148.

[CWZ17]

Juncheng Chen, Hua Wu, and Wenbo Zhang. A grey-box approach to getting gui test model. pages 254–261. International Workshop on Computer Science and Engineering (WCSE), 2017. cited By 0; Conference of International Workshop on Computer Science and Engineering, WCSE; Conference Date: 25 June 2017 Through 27 June 2017; Conference Code:129214.

[CYM10]

Tsunghsiang Chang, Tom Yeh, and Robert C. Miller. Gui testing using computer vision. volume 3, pages 1535–1544, Atlanta, GA, 2010. cited By 119; Conference of 28th Annual CHI Conference on Human Factors in Computing Systems, CHI 2010; Conference Date: 10 April 2010 Through 15 April 2010; Conference Code:80836.

[CYW17]

Lin Cheng, Zijiang Yang, and Chao Wang. Systematic reduction of gui test sequences. pages 849–860. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 2; Conference of 32nd IEEE/ACM International Conference on Automated Software Engineering, ASE 2017; Conference Date: 30 October 2017 Through 3 November 2017; Conference Code:132671.

[CZVO11]

Shauvik Roy Choudhary, Dan Zhao, Husayn Versee, and Alessandro Orso. Water: Web application test repair. pages 24–29, Toronto, ON, 2011. cited By 45; Conference of 1st International Workshop on End-to-End Test Script Engineering, ETSE 2011, Co-located with the 2011 International Symposium on Software Testing and Analysis; Conference Date: 17 July 2011 Through 17 July 2011; Conference Code:86178.

[CZW06]

Kaiyuan Cai, Lei Zhao, and Feng Wang. A dynamic partitioning approach for gui testing. volume 2, pages 223–228, Chicago, IL, 2006. cited By 3; Conference of 30th Annual International Computer Software and Applications Conference, COMPSAC 2006; Conference Date: 17 September 2006 Through 21 September 2006; Conference Code:69546.

[CZY20]

Tianqin Cai, Zhao Zhang, and Ping Yang. Fastbot: A multi-agent model-based test generation system. pages 93–96. Association for Computing Machinery, 2020. cited By 0; Conference of 2020 IEEE/ACM 1st International Conference on Automation of Software Test, AST 2020; Conference Date: 15 July 2020 Through 16 July 2020; Conference Code:162963.

[DAXAYZ12]

M. Datchayani, R. Arockia Xavier Annie, Palanichamy Yogesh, and Benet Zacharias. Test case generation and reusing test cases for gui designed with html. *Journal of Software*, 7(10):2269–2277, 2012. cited By 8.

[DBZ19]

Christian Degott, Nataniel P. Borges, and Andreas Zeller. Learning user interface element interactions. pages 101–111. Association for Computing Machinery, Inc, 2019. cited By 10; Conference of 28th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2019; Conference Date: 15 July 2019 Through 19 July 2019; Conference Code:149531.

[DC14a]

Ali Darvish and Carl K. Chang. Black-box test data generation for gui testing. pages 133–138. IEEE Computer Society, 2014. cited By 5; Conference of 14th International Conference on Quality Software, QSIC 2014; Conference Date: 2 October 2014 Through 3 October 2014; Conference Code:109264.

[DC14b]

Ali Darvish and Carl K. Chang. Guidiva: Automated discovery and validation of state-based gui invariants. pages 65–74. IEEE Computer Society, 2014. cited By 2; Conference of 38th Annual IEEE Computer Software and Applications Conference, COMP-SAC 2014; Conference Date: 21 July 2014 Through 25 July 2014; Conference Code:107382.

[dCFE17]

Guilherme de Cleva Farto and Andre Takeshi Endo. Reuse of model-based tests in mobile apps. pages 184–193. Association for Computing Machinery, 2017. cited By 4; Conference of 31st Brazilian Symposium on Software Engineering, SBES 2017; Conference Date: 20 September 2017 Through 22 September 2017; Conference Code:140105.

[Dek16]

Biplab Deka. Data-driven mobile app design. pages 21–24. Association for Computing Machinery, Inc, 2016. cited By 5; Conference of 29th Annual Symposium on User Interface Software and Technology, UIST 2016; Conference Date: 16 October 2016 Through 19 October 2016; Conference Code:124330.

 $[DFM^{+}19]$ 

Felix Dobslaw, Robert Feldt, David Michaelsson, Patrik Haar, Francisco Gomes de Oliveira Neto, and Richard Torkar. Estimating return on investment for gui test automation frameworks. volume 2019-October, pages 271–282. IEEE Computer Society, 2019. cited By 0; Conference of 30th IEEE International Symposium on Software Reliability Engineering, ISSRE 2019; Conference Date: 28 October 2019 Through 31 October 2019; Conference Code:157630.

[dGKdGV19]

Floren de Gier, Davy Kager, Stijn de Gouw, and Tanja E.J. Vos. Offline oracles for accessibility evaluation with the testar tool. volume 2019-May. IEEE Computer Society, 2019. cited By 0; Conference of 13th IEEE International Conference on Research Challenges in Information Science, RCIS 2019; Conference Date: 29 May 2019 Through 31 May 2019; Conference Code:153101.

[DGMR19]

Giovanni Denaro, Luca Guglielmo, Leonardo Mariani, and Oliviero Riganelli. Gui testing in production: Challenges and opportunities. Association for Computing Machinery, 2019. cited By 1; Conference of 3rd International Conference on Art, Science, and Engineering of Programming, Programming 2019; Conference Date: 1 April 2019 Through 4 April 2019; Conference Code:151513.

[DHD18]

Duong Tran Dinh, Phamngoc Hung, and Tung Nguyen Duy. A method for automated user interface testing of windows-based applications. pages 337–343. Association for Computing Machinery, 2018. cited By 0; Conference of 9th International Symposium on Information and Communication Technology, SoICT 2018; Conference Date: 6 December 2018 Through 7 December 2018; Conference Code:143217.

[DHH10]

Linshu Duan, Alexander Höfer, and Heinrich Hußmann. Modelbased testing of infotainment systems on the basis of a graphical human-machine interface. pages 5–9, Nice, 2010. cited By 3; Conference of 2nd International Conference on Advances in System Testing and Validation Lifecycle, VALID 2010; Conference Date: 22 August 2010 Through 27 August 2010; Conference Code:82823. Haitao Dan, Mark Harman, Jens Krinke, Lingbo Li, Alexandru

[DHK<sup>+</sup>14]

22 August 2010 Through 27 August 2010; Conference Date: 22 August 2010 Through 27 August 2010; Conference Code:82823. Haitao Dan, Mark Harman, Jens Krinke, Lingbo Li, Alexandru Marginean, and Fan Wu. Pidgin crasher: Searching for minimised crashing gui event sequences. *International Symposium on Search Based Software Engineering, SSBSE*, 8636 LNCS:253–258, 2014. cited By 4; Conference of 6th International Symposium on Search-Based Software Engineering, SSBSE 2014; Conference Date: 26 August 2014 Through 29 August 2014; Conference Code:106733.

[DJK12]

Rupesh Dev, Antti Jääskeläinen, and Mika Katara. Model-based gui testing. case smartphone camera and messaging development. *Advances in Computers*, 85:65–122, 2012. cited By 3.

[DKSM03]

Tamás Dabóczi, István Kollár, Gyula Simon, and Tamás Megyeri. Automatic testing of graphical user interfaces. volume 1, pages 441–445, Vail, CO, 2003. cited By 16; Conference of Proceedings of the 20th IEEE Information and Measurement Technology Conference; Conference Date: 20 May 2003 Through 22 May 2003; Conference Code:61133.

[DL20]

Jiranat Disayatripong and Yachai Limpiyakorn. Integrating traversal and visual-based techniques to initiate ui exploration scripting. pages 157–161. Association for Computing Machinery, 2020. cited By 0; Conference of 3rd International Conference on Computers in Management and Business, ICCMB 2020; Conference Date: 31 January 2020 Through 2 February 2020; Conference Code:164421.

 $[DLM^+11]$ 

Brett Daniel, Qingzhou Luo, Mehdi Mirzaaghaei, Danny Dig, Darko Marinov, and Mauro Pezzè. Automated gui refactoring and test script repair (position paper). pages 38–41, Toronto, ON, 2011. cited By 28; Conference of 1st International Workshop on End-to-End Test Script Engineering, ETSE 2011, Co-located with the 2011 International Symposium on Software Testing and Analysis; Conference Date: 17 July 2011 Through 17 July 2011; Conference Code:86178.

[DM06]

Anna Derezińska and Tomasz Małek. Unified automatic testing of a gui applications' family on an example of rss aggregators. volume 1, pages 549–559, Wisla, 2006. cited By 2; Conference of 1st International Multiconference on Computer Science and Information Technology, IMCSIT 2006. Part of 22nd Autumn Meeting of Polish Information Processing Society, PIPS; Conference Date: 6 November 2006 Through 10 November 2006; Conference Code:87733.

[DMFST20]

Sergio Di Martino, Anna Rita Fasolino, Luigi L.L. Starace, and Porfirio Tramontana. Comparing the effectiveness of capture and replay against automatic input generation for android graphical user interface testing. Software Testing Verification and Reliability, 2020. cited By 1.

[dMS10] Ernesto Cid Brasil de Matos and Thiago C. Sousa. From formal

requirements to automated web testing and prototyping. Innovations in Systems and Software Engineering, 6(1):163–169, 2010.

cited By 5.

[DP17] Fernando Dias and Ana C.R. Paiva. Pattern-based usability testing. pages 366–371. Institute of Electrical and Electronics Engi-

neers Inc., 2017. cited By 5; Conference of 10th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2017; Conference Date: 13 March 2017 Through

17 March 2017; Conference Code:127387.

[DS12] Mai Daftedar and Mohamed Shalan. Automatic pseudo-random regression testing for gui-centric embedded software. pages 293-298, Cairo, 2012. cited By 0; Conference of 2012 7th International

> Conference on Computer Engineering and Systems, ICCES 2012; Conference Date: 27 November 2012 Through 29 November 2012;

Conference Code:95585.

[DVP13] Eelco Dolstra, Raynor Vliegendhart, and Johan A. Pouwelse.

Crowdsourcing gui tests. pages 332-341, Luxembourg, 2013. cited By 41; Conference of IEEE 6th International Conference on Software Testing, Verification and Validation, ICST 2013; Conference

Date: 18 May 2013 Through 20 May 2013; Conference Code: 98979.

[DZ18] Fakhrud Din and K. Z. Zamli. Fuzzy adaptive teaching learningbased optimization strategy for gui functional test cases gen-

eration. pages 92–96. Association for Computing Machinery, 2018. cited By 6; Conference of 7th International Conference on Software and Computer Applications, ICSCA 2018; Conference Date: 8 February 2018 Through 10 February 2018; Conference

Code:136540.

[EAARV17] Anna I. Esparcia-Alcazar, Francisco Almenar, Urko Rueda, and Tanja E.J. Vos. Evolving rules for action selection in automated

testing via genetic programming - a first approach. ropean Conference on the Applications of Evolutionary Computation, EvoApplications 2017, 10200 LNCS:82-95, 2017. cited By 3; Conference of 20th European Conference on the Applications of Evolutionary Computation, EvoApplications 2017; Conference Date: 19 April 2017 Through 21 April 2017; Conference

Code:190619.

[EAAVR18] Anna I. Esparcia-Alcazar, Francisco Almenar, Tanja E.J. Vos, and Urko Rueda. Using genetic programming to evolve action selec-

tion rules in traversal-based automated software testing: results obtained with the testar tool. Memetic Computing, 10(3):257-

265, 2018. cited By 7.

 $[EAXD^+10]$ Omar El-Ariss, Dianxiang Xu, Santosh Dandey, Bradley Vender,

Phillip E. McClean, and Brian M. Slator. A systematic capture and replay strategy for testing complex gui based java applications. pages 1038-1043, Las Vegas, NV, 2010. cited By 15; Conference of 7th International Conference on Information Technology

- New Generations, ITNG 2010; Conference Date: 12 April 2010

Through 14 April 2010; Conference Code:81329.

[EGS20]

Islam T. Elgendy, Moheb Ramzy Girgis, and Adel A. Sewisy. A gabased approach to automatic test data generation for asp. net web applications. IAENG International Journal of Computer Science,

47(3):557-564, 2020. cited By 0.

[EKR03] Sebastian G. Elbaum, Srikanth Karre, and Gregg Rothermel. Improving web application testing with user session data. pages 49-59, Portland, OR, 2003. IEEE Computer Society. cited By 146;

Conference of 25th International Conference on Software Engineering; Conference Date: 3 May 2003 Through 10 May 2003;

; Conference Date: 17 August 2020 Through 21 August 2020; Con-

Conference Code:61199.

[EKR20] Juha Eskonen, Julen Kahles, and Joel Reijonen. Automating gui testing with image-based deep reinforcement learning. pages 160-167. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 1st IEEE International Conference on Autonomic Computing and Self-Organizing Systems, ACSOS 2020

ference Code:163201.

[EMS19] Hadeel Mohamed Eladawy, Amr E. Mohamed, and Sameh A. Salem. A new algorithm for repairing web-locators using optimization techniques. pages 327-331. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 1; Conference of 13th International Conference on Computer Engineering and Systems, ICCES 2018; Conference Date: 18 December 2018 Through 19

December 2018; Conference Code:145156.

Markus Ermuth and Michael Pradel. Monkey see, monkey do: [EP16] Effective generation of gui tests with inferred macro events. pages 82–93. Association for Computing Machinery, Inc, 2016. cited By 23; Conference of 25th International Symposium on Software Testing and Analysis, ISSTA 2016; Conference Date: 18 July 2016

Through 20 July 2016; Conference Code:122744.

Carl B. Erickson, Ralph Palmer, David Crosby, Michael Marsiglia, and Micah Alles. Make haste, not waste: Automated system testing. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioin-

formatics), 2753:120–128, 2003. cited By 0.

[EPTD05] Paul Englefield, Claire Paddison, Mark Tibbits, and Isha Damani. A proposed architecture for integrating accessibility test tools.

IBM Systems Journal, 44(3):537-555, 2005. cited By 9.

[ERGF18] Marcelo Medeiros Eler, José Miguel Rojas, Yan Ge, and Gordon Fraser. Automated accessibility testing of mobile apps. pages 116– 126. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 18; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation, ICST 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference

Code:136754.

Sebastian G. Elbaum, Gregg Rothermel, Srikanth Karre, and Marc Fisher. Leveraging user-session data to support web application testing. IEEE Transactions on Software Engineering, 31(3):187-

202, 2005. cited By 176.

 $[EPC^+03]$ 

[ERKF05]

[EWZC11] Vladimir Entin, Mathias Winder, Bo Zhang, and Stephan Christmann. Combining model-based and capture-replay testing techniques of graphical user interfaces: An industrial approach, pages 572-577, Berlin, 2011. cited By 7; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:86023. [EWZC12] Vladimir Entin, Mathias Winder, Bo Zhang, and Stephan Christmann. Introducing model-based testing in an industrial scrum project. pages 43-49, Zurich, 2012. cited By 9; Conference of 2012 7th International Workshop on Automation of Software Test, AST 2012; Conference Date: 2 June 2012 Through 3 June 2012; Conference Code:91305. [FBJ11] Karel Frajták, Miroslav Bures, and Ivan Jelínek. Manual testing of web software systems supported by direct guidance of the tester based on design model. World Academy of Science, Engineering and Technology, 80:243-246, 2011. cited By 1. [FBJ15a] Martin Filipsky, Miroslav Bures, and Ivan Jelínek. Creating smart tests from recorded automated test cases. World Conference on Information Systems and Technologies, WorldCIST, 353:773–780, 2015. cited By 2; Conference of World Conference on Information Systems and Technologies, WorldCIST 2015; Conference Date: 1 April 2015 Through 3 April 2015; Conference Code:115919. [FBJ15b] Karel Frajták, Miroslav Bures, and Ivan Jelínek. Transformation of ifml schemas to automated tests. pages 509-511. Association for Computing Machinery, Inc, 2015. cited By 10; Conference of Research in Adaptive and Convergent Systems, RACS 2015 ; Conference Date: 9 October 2015 Through 12 October 2015; Conference Code:118350. [FFP10] Ricardo D.F. Ferreira, João Pascoal Faria, and Ana C.R. Paiva. Test coverage analysis of uml activity diagrams for interactive systems. pages 268-273, Porto, 2010. cited By 2; Conference of 7th International Conference on the Quality of Information and Communications Technology, QUATIC 2010; Conference Date: 29 September 2010 Through 2 October 2010; Conference Code:83358. [FGX09] Chen Fu, Mark Grechanik, and Qing Xie. Inferring types of references to gui objects in test scripts. pages 1–10, Denver, CO, 2009. cited By 12; Conference of 2nd International Conference on Software Testing, Verification, and Validation, ICST 2009; Conference Date: 1 April 2009 Through 4 April 2009; Conference Code:76415. [FL02] Mariusz A. Fecko and Christopher M. Lott. Lessons learned from automating tests for an operations support system. Software -Practice and Experience, 32(15):1485-1506, 2002. cited By 5. [FNFG11] Daniel Fritsi, Csaba Nagy, Rudolf Ferenc, and Tibor Gyimóthy. A layout independent gui test automation tool for applications developed in magic/unipaas. pages 249–261, Tallinn, 2011. cited By 5; Conference of 12th Symposium on Programming Languages

and Software Tools, SPLST 2011; Conference Date: 5 November 2011 Through 7 November 2011; Conference Code:93276.

[FNFG13]

Daniel Fritsi, Csaba Nagy, Rudolf Ferenc, and Tibor Gyimóthy. A methodology and framework for automatic layout independent gui testing of applications developed in magic xpa. *International Conference on Computational Science and Its Applications, ICCSA*, 7972 LNCS(PART 2):513–528, 2013. cited By 0; Conference of 13th International Conference on Computational Science and Its Applications, ICCSA 2013; Conference Date: 24 June 2013 Through 27 June 2013; Conference Code:97954.

[FSA09]

Areej Fraiwan, Samer M.J. Samarah, and Izzat Mahmoud Alsmadi. Gui's test cases reduction using sequential patterns. Amman, 2009. Academy Publisher Inc. cited By 0; Conference of 3rd Mosharaka International Conference on Communications, Signals and Coding, MIC-CSC 2009; Conference Date: 19 November 2009 Through 21 November 2009; Conference Code:104166.

[FSL+16]

Xiaoxin Fang, Bin Sheng, Ping Li, Dan Wu, and Enhua Wu. Automatic gui test by using sift matching. *China Communications*, 13(9):227–236, 2016. cited By 1.

[Fuc18]

Andreas Fuchs. Automated test case generation for java ee based web applications. 12th International Conference on Tests and Proofs, TAP 2018 Held as Part of STAF 2018, 10889 LNCS:167–176, 2018. cited By 0; Conference of 12th International Conference on Tests and Proofs, TAP 2018 Held as Part of STAF 2018; Conference Date: 27 June 2018 Through 29 June 2018; Conference Code:214679.

[FYCY12]

Jing Feng, Beibei Yin, Kaiyuan Cai, and Zhongxing Yu. 3-way gui test cases generation based on event-wise partitioning. pages 89–97, Xi'an, Shaanxi, 2012. cited By 3; Conference of 12th International Conference on Quality Software, QSIC 2012; Conference Date: 27 August 2012 Through 29 August 2012; Conference Code:93789.

[FZ07]

Li Feng and Sheng Zhuang. Action-driven automation test framework for graphical user interface (gui) software testing. pages 22–27, Baltimore, MD, 2007. cited By 6; Conference of 42nd Annual IEEE AUTOTESTCON Conference 2007; Conference Date: 17 September 2007 Through 20 September 2007; Conference Code:72826.

 $[GCP^+18]$ 

Giovanni Grano, Adelina Ciurumelea, Sebastiano Panichella, Fabio Palomba, and Harald C. Gall. Exploring the integration of user feedback in automated testing of android applications. volume 2018-March, pages 72–83. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 23; Conference of 25th IEEE International Conference on Software Analysis, Evolution and Reengineering, SANER 2018; Conference Date: 20 March 2018 Through 23 March 2018; Conference Code:135723.

[GCSY13]

Paul E. Givens, Aleksandar Chakarov, Sriram Sankaranarayanan, and Tom Yeh. Exploring the internal state of user interfaces by combining computer vision techniques with grammatical inference. pages 1165–1168, San Francisco, CA, 2013. cited By 3; Conference of 2013 35th International Conference on Software Engineering,

ICSE 2013; Conference Date: 18 May 2013 Through 26 May 2013; Conference Code:100317. [GCZM16] Zebao Gao, Zhenyu Chen, Yunxiao Zou, and Atif M. Memon. Sitar: Gui test script repair. IEEE Transactions on Software Enqineering, 42(2):170–186, 2016. cited By 27. [GF11] Robert Gove and Jorge Faytong. Identifying infeasible gui test cases using support vector machines and induced grammars. pages 202–211, Berlin, 2011. cited By 14; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:86023. [GF12] Robert Gove and Jorge Faytong. Machine learning and eventbased software testing: Classifiers for identifying infeasible gui event sequences. Advances in Computers, 86:109-135, 2012. cited By 13. [GFM16] Zebao Gao, Chunrong Fang, and Atif M. Memon. Pushing the limits on automation in gui regression testing. pages 565-575. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 6; Conference of 26th IEEE International Symposium on Software Reliability Engineering, ISSRE 2015; Conference Date: 2 November 2015 Through 5 November 2015; Conference Code:119083. [GFZ12a] Florian Groß, Gordon Fraser, and Andreas Zeller. Exsyst: Searchbased gui testing. pages 1423-1426, Zurich, 2012. cited By 33; Conference of 34th International Conference on Software Engineering, ICSE 2012; Conference Date: 2 June 2012 Through 9 June 2012; Conference Code:91326. [GFZ12b] Florian Groß, Gordon Fraser, and Andreas Zeller. Search-based system testing: High coverage, no false alarms. pages 67–77, Minneapolis, MN, 2012. cited By 76; Conference of 21st International Symposium on Software Testing and Analysis, ISSTA 2012; Conference Date: 15 July 2012 Through 20 July 2012; Conference Code:92048. [GHG15] Tobias Griebe, Marc Hesenius, and Volker Gruhn. Towards automated ui-tests for sensor-based mobile applications. 14th International Conference on New Trends in Intelligent Software Methodology, Tools, and Techniques, SoMeT 2015, 532:3-17, 2015. cited By 10; Conference of 14th International Conference on New Trends in Intelligent Software Methodology, Tools, and Techniques, SoMeT 2015; Conference Date: 15 September 2015 Through 17 September 2015; Conference Code:140719.  $[GHY^+20]$ Chao Guo, Tieke He, Wei Yuan, Yue Guo, and Rui Hao. Crowdsourced requirements generation for automatic testing via knowledge graph. pages 545–548. Association for Computing Machinery, Inc, 2020. cited By 0; Conference of 29th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2020; Conference Date: 18 July 2020 Through 22 July 2020; Conference Code:161847.  $[GIB^+17]$ Vahid Garousi, İhsan Berk Işık, Ahmet Zeki Boyraz, Wasif Afzal, Berker Baydan, Burak Yolaçan, Adem Çağlar, Seçkin Çaylak, and Kadir Herkiloğlu. Comparing automated visual gui testing tools:

An industrial case study. pages 21–28. Association for Computing Machinery, Inc, 2017. cited By 10; Conference of 8th ACM SIG-SOFT International Workshop on Automated Software Testing, A-TEST 2017, co-located with the International ESEC/FSE Conference, FSE 2017; Conference Date: 4 September 2017 Through 5 September 2017; Conference Code:138675. Svetoslav R. Ganov, Chip Killmar, Sarfraz Khurshid, and De-

[GKKP08]

Svetoslav R. Ganov, Chip Killmar, Sarfraz Khurshid, and Dewayne E. Perry. Test generation for graphical user interfaces based on symbolic execution. pages 33–40, Leipzig, 2008. cited By 21; Conference of 3rd International Workshop on Automation of Software Test, AST 2008, held in Conjunction with the 30th International Conference on Software Engineering, ICSE 2008; Conference Date: 11 May 2008 Through 11 May 2008; Conference Code:85665.

[GKKP09]

Svetoslav R. Ganov, Chip Killmar, Sarfraz Khurshid, and Dewayne E. Perry. Event listener analysis and symbolic execution for testing gui applications. *International Conference on Formal Engineering Methods, ICFEM*, 5885 LNCS:69–87, 2009. cited By 25; Conference of 11th International Conference on Formal Engineering Methods, ICFEM 2009; Conference Date: 9 December 2009 Through 12 December 2009; Conference Code:83110.

[GLS10]

Sally E. Goldin, Thanachao Luengwitayakorn, and Supakit Supadarattanawong. Test-driven development for graphical uis: A multi-platform toolset. pages 2429–2433, Fukuoka, 2010. cited By 0; Conference of 2010 IEEE Region 10 Conference, TENCON 2010; Conference Date: 21 November 2010 Through 24 November 2010; Conference Code:83758.

[GNAM13]

Lorenzo Gomez, Iulian Neamtiu, Tanzirul Azim, and Todd D. Millstein. Reran: Timing- and touch-sensitive record and replay for android. pages 72–81, San Francisco, CA, 2013. cited By 202; Conference of 2013 35th International Conference on Software Engineering, ICSE 2013; Conference Date: 18 May 2013 Through 26 May 2013; Conference Code:100317.

[GPF10]

André M.P. Grilo, Ana C.R. Paiva, and João Pascoal Faria. Reverse engineering of gui models for testing. Santiago de Compostela, 2010. cited By 28; Conference of 5th Iberian Conference on Information Systems and Technologies, CISTI 2010; Conference Date: 16 June 2010 Through 19 June 2010; Conference Code:81806.

[GRAS16]

María Gómez, Romain Rouvoy, Bram Adams, and Lionel Seinturier. Mining test repositories for automatic detection of ui performance regressions in android apps. pages 13–24. Association for Computing Machinery, Inc, 2016. cited By 7; Conference of 13th Working Conference on Mining Software Repositories, MSR 2016; Conference Date: 14 May 2016 Through 15 May 2016; Conference Code:121803.

[GSM16]

Eduardo Gómez, Berend Semke, and Stefan Mohacsi. Enhancing test automation of ground data systems through direct access to the user interfaces. American Institute of Aeronautics and Astronautics Inc, AIAA, 2016. cited By 1; Conference of 14th

International Conference on Space Operations, SpaceOps 2016; Conference Date: 16 May 2016 Through 20 May 2016; Conference Code:192229.

 $[GSM^{+}19]$ 

Tianxiao Gu, Chengnian Sun, Xiaoxing Ma, Chun Cao, Chang Xu, Yuan Yao, Qirun Zhang, Jian Lü, and Zhendong Su. Practical gui testing of android applications via model abstraction and refinement. volume 2019-May, pages 269–280. IEEE Computer Society, 2019. cited By 15; Conference of 41st IEEE/ACM International Conference on Software Engineering, ICSE 2019; Conference Date: 25 May 2019 Through 31 May 2019; Conference Code:151191.

 $[GSS^{+}20]$ 

Wunan Guo, Liwei Shen, Ting Su, Xin Peng, and Weiyang Xie. Improving automated gui exploration of android apps via static dependency analysis. pages 557–568. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 36th IEEE International Conference on Software Maintenance and Evolution, ICSME 2020; Conference Date: 27 September 2020 Through 3 October 2020; Conference Code:164655.

[GXF09a]

Mark Grechanik, Qing Xie, and Chen Fu. Creating gui testing tools using accessibility technologies. pages 243–250, Denver, CO, 2009. cited By 23; Conference of International Conference on Software Testing, Verification, and Validation Workshops, ICSTW; Conference Date: 1 April 2009 Through 4 April 2009; Conference Code:76734.

[GXF09b]

Mark Grechanik, Qing Xie, and Chen Fu. Experimental assessment of manual versus tool-based maintenance of gui-directed test scripts. pages 9–18, Edmonton, AB, 2009. cited By 17; Conference of 2009 International Conference on Software Maintenance, ICSM 2009; Conference Date: 20 September 2009 Through 26 September 2009; Conference Code:78644.

[GXF09c]

Mark Grechanik, Qing Xie, and Chen Fu. Maintaining and evolving gui-directed test scripts. pages 408–418, Vancouver, BC, 2009. cited By 104; Conference of 2009 31st International Conference on Software Engineering, ICSE 2009; Conference Date: 16 May 2009 Through 24 May 2009; Conference Code:79629.

[GY18]

Vahid Garousi and Erdem Yildirim. Introducing automated gui testing and observing its benefits: An industrial case study in the context of law-practice management software. pages 138–145. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 6; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference Code:138044.

[GZL10]

Feng Gao, Ling Zhao, and Chang Liu. Gui testing techniques based on event interactive graph tree model. pages 823–827, Harbin, Heilongjiang, 2010. cited By 1; Conference of 2010 IEEE International Conference on Information and Automation, ICIA 2010; Conference Date: 20 June 2010 Through 23 June 2010; Conference Code:81420.

[Hao18]

L. V. Haoyin. Automatic android application gui testing-a random walk approach. volume 2018-January, pages 72–76. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 8; Conference of 2nd IEEE International Conference on Wireless Communications, Signal Processing and Networking, WiSPNET 2017; Conference Date: 22 March 2017 Through 24 March 2017; Conference Code:134757.

[Hau11]

Benedikt Hauptmann. Model-based test instantiation for applications with user interfaces. pages 27–30, Torre Canne, BR, 2011. cited By 0; Conference of 12th International Conference on Product Focused Software Development and Process Improvement, PROFES 2011; Conference Date: 20 June 2011 Through 22 June 2011; Conference Code: 92379.

[HC08]

Sunmyung Myoung Hwang and Hyeon-cheol Chae. Design and implementation of mobile gui testing tool. pages 704–707, Daejeon, 2008. cited By 8; Conference of 2008 International Conference on Convergence and Hybrid Information Technology, ICHIT 2008; Conference Date: 28 August 2008 Through 29 August 2008; Conference Code: 73976.

[HC12]

Niels Hallenberg and Philip Lykke Carlsen. Declarative automated test. pages 96–102, Zurich, 2012. cited By 2; Conference of 2012 7th International Workshop on Automation of Software Test, AST 2012; Conference Date: 2 June 2012 Through 3 June 2012; Conference Code:91305.

[HCD09]

Ying Hou, Rong Chen, and Zhenjun Du. Automated gui testing for j2me software based on fsm. pages 341–346, Dalian, 2009. cited By 6; Conference of International Conference on Scalable Computing and Communications- 8th International Conference on Embedded Computing, ScalCom-EmbeddedCom 2009; Conference Date: 25 September 2009 Through 27 September 2009; Conference Code:78938.

[HCDB16]

Madhurima Hooda, Anuj Kumar Chauhan, Saru Dhir, and Madhulika Bhatia. Difficulties and challenges faced in testing ajax applications. pages 113–115. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 1; Conference of 2015 2015 International Conference on Soft Computing Techniques and Implementations, ICSCTI 2015; Conference Date: 8 October 2015 Through 10 October 2015; Conference Code:122283.

[HCM10]

Si Huang, Myra B. Cohen, and Atif M. Memon. Repairing gui test suites using a genetic algorithm. pages 245–254, Paris, 2010. cited By 71; Conference of 3rd International Conference on Software Testing, Verification and Validation, ICST 2010; Conference Date: 7 April 2010 Through 9 April 2010; Conference Code:81067.

[HCP11]

Chienhsin Hsueh, Yungpin Cheng, and Weicheng Pan. Intrusive test automation with failed test case clustering. pages 89–96, Ho Chi Minh, 2011. cited By 6; Conference of 18th Asia Pacific Software Engineering Conference, APSEC 2011; Conference Date: 5 December 2011 Through 8 December 2011; Conference Code:88265.

[HJK10]

[HD14] Shah Rukh Humayoun and Yael Dubinsky. Mobigolog: Formal task modelling for testing user gestures interaction in mobile applications. pages 46–49, Hyderabad, 2014. Association for Computing Machinery, cited By 5; Conference of 1st International Conference on Mobile Software Engineering and Systems, MOBILESoft 2014 ; Conference Date: 2 June 2014 Through 3 June 2014; Conference Code:106012. [HD19] Stefan Huber and Lukas Demetz. Performance analysis of mobile cross-platform development approaches based on typical ui interactions, pages 40-48. SciTePress, 2019, cited By 2; Conference of 14th International Conference on Software Technologies, ICSOFT 2019 : Conference Date: 26 July 2019 Through 28 July 2019; Conference Code:151484. [HG15] Ferenc Horváth and Tamás Gergely. Structural information aided automated test method for magic 4gl. Acta Cybernetica, 22(1):81-99, 2015. cited By 0. [HGGF11] Andreas Heinecke, Tobias Griebe, Volker Gruhn, and Holger Flemig. Business process-based testing of web applications. Lecture Notes in Business Information Processing, 66 LNBIP:603-614, 2011. cited By 3. [HGGG14] Marc Hesenius, Tobias Griebe, Stefan Gries, and Volker Gruhn. Automating ui tests for mobile applications with formal gesture descriptions. pages 213-222. Association for Computing Machinery, Inc, 2014. cited By 15; Conference of 16th ACM International Conference on Human-Computer Interaction with Mobile Devices and Services, MobileHCI 2014; Conference Date: 23 September 2014 Through 26 September 2014; Conference Code:114658. [HGWB11] Steffen Herbold, Jens Grabowski, Stephan Waack, and Uwe Bünting. Improved bug reporting and reproduction through nonintrusive gui usage monitoring and automated replaying. pages 232–241, Berlin, 2011. cited By 14; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:86023.  $[HIL^+09]$ Ulrik H. Hjort, Jacob Illum, Kim Guldstrand Larsen, Michael A. Petersen, and Arne Skou. Model-based gui testing using uppaal at novo nordisk. 2nd World Congress on Formal Methods, FM 2009, 5850 LNCS:814-818, 2009. cited By 1; Conference of 2nd World Congress on Formal Methods, FM 2009; Conference Date: 2 November 2009 Through 6 November 2009; Conference Code:78798. [HJ11] Benedikt Hauptmann and Maximilian Junker. Utilizing user interface models for automated instantiation and execution of system tests. pages 8–15, Toronto, ON, 2011. cited By 2; Conference of 1st International Workshop on End-to-End Test Script Engineering, ETSE 2011, Co-located with the 2011 International Symposium on Software Testing and Analysis; Conference Date: 17 July 2011 Through 17 July 2011; Conference Code:86178.

Henri Heiskanen, Antti Jääskeläinen, and Mika Katara. Debug support for model-based gui testing. pages 25–34, Paris, 2010.

cited By 5; Conference of 3rd International Conference on Software Testing, Verification and Validation, ICST 2010; Conference Date: 7 April 2010 Through 9 April 2010; Conference Code:81067. [HJSK20] Taixin Huang, Jian Wei Ji, Yunxu Shou, and Yan Kong. Research and application of a user interface automatic testing method based on data driven. International Conference on Confluence, 595 LNEE:202-211, 2020. cited By 0; Conference of 4th International Symposium on Software Reliability, Industrial Safety, Cyber Security and Physical Protection of Nuclear Power Plant, ISNPP 2019 ; Conference Date: 21 August 2019 Through 23 August 2019; Conference Code:235969. [HK06] Antawan Holmes and Marc Kellogg. Automating functional tests using selenium. volume 2006, pages 270–275, Minneapolis, MN, 2006. cited By 46; Conference of AGILE Conference, 2006; Conference Date: 23 July 2006 Through 28 July 2006; Conference Code:69553.  $[HKH^{+}13]$ Christoph Herzog, Iraklis Kordomatis, Wolfgang Holzinger, Ruslan R. Fayzrakhmanov, and Bernhard Krüpl-Sypien. Featurebased object identification for web automation. pages 742–749, Coimbra, 2013. cited By 3; Conference of 28th Annual ACM Symposium on Applied Computing, SAC 2013; Conference Date: 18 March 2013 Through 22 March 2013; Conference Code:96995. [HKLH19] Leegeun Ha, Sungwon Kang, Jihyun Lee, and Younghun Han. Automatic generation of gui test inputs using user configurations. Studies in Computational Intelligence, 786:103-116, 2019. cited By 1. [HL12] Ying Huang and Lu Lu. Apply ant colony to event-flow model for graphical user interface test case generation. IET Software, 6(1):50–60, 2012. cited By 5. [HL18] Kristian Fjeld Hasselknippe and Jingyue Li. A novel tool for automatic gui layout testing. volume 2017-December, pages 695-700. IEEE Computer Society, 2018. cited By 5; Conference of 24th Asia-Pacific Software Engineering Conference, APSEC 2017 ; Conference Date: 4 December 2017 Through 8 December 2017; Conference Code:135077.  $[HLN^+14]$ Shuai Hao, Bin Liu, Suman Kumar Nath, William G.J. Halfond, and Ramesh Govindan. Puma: Programmable ui-automation for large-scale dynamic analysis of mobile apps. pages 204–217, Bretton Woods, NH, 2014. Association for Computing Machinery. cited By 192; Conference of 12th Annual International Conference on Mobile Systems, Applications, and Services, MobiSys 2014; Conference Date: 16 June 2014 Through 19 June 2014; Conference Code:105809. [HLS17a] Chiawei Hsu, Shanhsin Lee, and Shiuhpyng Winston Shieh. Adaptive gestures for gui testing on smartphones. IEEE Software, 2017. cited By 0; Article in Press. [HLS17b] Chiawei Hsu, Shanhsin Lee, and Shiuhpyng Winston Shieh. Adap-

tive virtual gestures for gui testing on smartphones. IEEE Soft-

ware, 34(5):22-29, 2017. cited By 0.

[HSO97]

[HM08] Daniel R. Hackner and Atif M. Memon. Test case generator for guitar. pages 959–960, Leipzig, 2008. cited By 34; Conference of 30th International Conference on Software Engineering 2008, ICSE'08: Conference Date: 10 May 2008 Through 18 May 2008; Conference Code:74416. [HM11] Theodore D. Hellmann and Frank Maurer. Rule-based exploratory testing of graphical user interfaces. pages 107–116, Salt Lake City, UT, 2011. cited By 13; Conference of 2011 Agile Conference, Agile 2011; Conference Date: 8 August 2011 Through 12 August 2011; Conference Code:86573. [HMH15] Elahe Habibi and Seyed Hassan Mirian-Hosseinabadi. Eventdriven web application testing based on model-based mutation testing. Information and Software Technology, 67:159–179, 2015. cited By 8. [HN11a] Cuixiong Hu and Iulian Neamtiu. Automating gui testing for android applications. pages 77–83, Waikiki, Honolulu, HI, 2011. cited By 178; Conference of 6th International Workshop on Automation of Software Test, AST 2011, Co-located with ICSE 2011; Conference Date: 22 May 2011 Through 23 May 2011; Conference Code:85238. [HN11b] Cuixiong Hu and Iulian Neamtiu. A gui bug finding framework for android applications. pages 1490–1491, TaiChung, 2011. cited By 12; Conference of 26th Annual ACM Symposium on Applied Computing, SAC 2011; Conference Date: 21 March 2011 Through 24 March 2011; Conference Code:85134. [HPW09] Birgit Hofer, Bernhard Peischl, and Franz Wotawa. Gui savvy endto-end testing with smart monkeys. pages 130–137, Vancouver, BC, 2009. cited By 13; Conference of 2009 ICSE Workshop on Automation of Software Test, AST 2009; Conference Date: 16 May 2009 Through 24 May 2009; Conference Code:77442. [HQ07] Muhammad Umar Hayat and Nauman Qadeer. Intra component gui test case generation technique. pages 153–156, Karachi, 2007. cited By 0; Conference of 2007 International Conference on Information and Emerging Technologies, ICIET; Conference Date: 6 July 2007 Through 7 July 2007; Conference Code:73152. [HS14] Nutharat Harnvorawong and Taratip Suwannasart. An automated testing tool using ui structure. volume 2209, pages 574–578. Newswood Limited, 2014. cited By 1; Conference of International MultiConference of Engineers and Computer Scientists, IMECS 2014 ; Conference Date: 12 March 2014 Through 14 March 2014; Conference Code:113107. [HSMN16] Maria Husmann, Michael Spiegel, Alfonso Murolo, and Moira C. Norrie. Ui testing cross-device applications. pages 179–188. Association for Computing Machinery, Inc, 2016. cited By 7; Conference of 11th Annual ACM International Conference on Interactive Surfaces and Spaces, ISS 2016; Conference Date: 6 November 2016 Through 9 November 2016; Conference Code:124750.

I. D. Hicks, G. J. South, and A. O. Oshisanwo. Automated testing as an aid to systems integration. *BT Technology Journal*, 15(3):26–

36, 1997. cited By 6.

[HTKT18]

Akihiro Hori, Shingo Takada, Toshiyuki Kurabayashi, and Haruto Tanno. Image-based approach to determining regression test results of dynamic web applications. *International Journal of Software Engineering and Knowledge Engineering*, 28(7):1001–1025, 2018. cited By 0.

[HVFR05]

 $[HWL^{+}18]$ 

Jean Hartmann, Marlon E.R. Vieira, Herbert Foster, and Axel Ruder. A uml-based approach to system testing. *Innovations in Systems and Software Engineering*, 1(1):12–24, 2005. cited By 59. Jiajun Hu, Lili Wei, Yepang Liu, Shing Chi Cheung, and Huaxun Huang. A tale of two cities: How webview induces bugs to android applications. pages 702–713. Association for Computing Machinery, Inc, 2018. cited By 7; Conference of 33rd IEEE/ACM International Conference on Automated Software Engineering, ASE 2018; Conference Date: 3 September 2018 Through 7 September 2018; Conference Code:140337.

[HYTY14]

Gang Hu, Xinhao Yuan, Yang Tang, and Junfeng Yang. Efficiently, effectively detecting mobile app bugs with appdoctor. Amsterdam, 2014. Association for Computing Machinery. cited By 58; Conference of 9th ACM European Conference on Computer Systems, EuroSys 2014; Conference Date: 14 April 2014 Through 16 April 2014; Conference Code:105082.

[HZPR15]

Matthew Halpern, Yuhao Zhu, Ramesh V. Peri, and Vijay Janapa Reddi. Mosaic: Cross-platform user-interaction record and replay for the fragmented android ecosystem. pages 215–224. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 39; Conference of 2015 15th IEEE International Symposium on Performance Analysis of Systems and Software, ISPASS 2015; Conference Date: 29 March 2015 Through 31 March 2015; Conference Code:112097.

[HZY18]

Gang Hu, Linjie Zhu, and Junfeng Yang. Appflow: Using machine learning to synthesize robust, reusable ui tests. pages 269–282. Association for Computing Machinery, Inc, 2018. cited By 15; Conference of 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2018; Conference Date: 4 November 2018 Through 9 November 2018; Conference Code:142072.

[IKSK20]

Kateryna Ivanova, Galyna V. Kondratenko, Ievgen V. Sidenko, and Yuriy Panteliyovych Kondratenko. Artificial intelligence in automated system for web-interfaces visual testing. volume 2604, pages 1019–1031. CEUR-WS, 2020. cited By 2; Conference of 4th International Conference on Computational Linguistics and Intelligent Systems, COLINS 2020; Conference Date: 23 April 2020 Through 24 April 2020; Conference Code:159817.

[IKTK18]

Muneyoshi Iyama, Hiroyuki Kirinuki, Haruto Tanno, and Toshiyuki Kurabayashi. Automatically generating test scripts for gui testing. pages 146–150. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference Code:138044.

[Imp15]

Gennaro Imparato. A combined technique of gui ripping and input perturbation testing for android apps. volume 2, pages 760–762. IEEE Computer Society, 2015. cited By 7; Conference of 37th IEEE/ACM International Conference on Software Engineering, ICSE 2015; Conference Date: 16 May 2015 Through 24 May 2015; Conference Code:116104.

[Ino19]

Ushio Inoue. Gui testing for introductory object-oriented programming exercises. 5th ACIS International Conference on Computational Science/Intelligence and Applied Informatics, CSII 2018, 787:1–13, 2019. cited By 1; Conference of 5th ACIS International Conference on Computational Science/Intelligence and Applied Informatics, CSII 2018; Conference Date: 10 July 2018 Through 12 July 2018; Conference Code:216779.

[JAZH10]

Milan Jović, Andrea Adamoli, Dmitrijs Zaparanuks, and Matthias Hauswirth. Automating performance testing of interactive java applications. pages 8–15, Cape Town, 2010. cited By 17; Conference of 5th Workshop on Automation of Software Test, AST 2010, in Conjunction with the 32nd ACM/IEEE International Conference on Software Engineering, ICSE 2010; Conference Date: 2 May 2010 Through 8 May 2010; Conference Code:81178.

[Ji19]

Meichen Ji. Uichecker: An automatic detection platform for android gui errors. volume 2018-November, pages 957–961. IEEE Computer Society, 2019. cited By 0; Conference of 9th IEEE International Conference on Software Engineering and Service Science, ICSESS 2018; Conference Date: 23 November 2018 Through 25 November 2018; Conference Code:146017.

[JKK<sup>+</sup>08a]

Antti Jääskeläinen, Mika Katara, Antti Kervinen, Henri Heiskanen, Mika Maunumaa, and Tuula Pääkkönen. Model-based testing service on the web. Joint 20th IFIP TC6/WG6.1 International Conference on Testing of Communicating Systems, TESTCOM 2008 and 8th International Workshop on Formal Approaches to Testing of Software, FATES 2008, 5047 LNCS:38–53, 2008. cited By 18; Conference of Joint 20th IFIP TC6/WG6.1 International Conference on Testing of Communicating Systems, TESTCOM 2008 and 8th International Workshop on Formal Approaches to Testing of Software, FATES 2008; Conference Date: 10 June 2008 Through 13 June 2008; Conference Code:94543.

[JKK08b]

Antti Jääskeläinen, Antti Kervinen, and Mika Katara. Creating a test model library for gui testing of smartphone applications. pages 276–282, Oxford, 2008. cited By 11; Conference of 8th International Conference on Quality Software, QSIC 2008; Conference Date: 12 August 2008 Through 13 August 2008; Conference Code: 73764.

 $[JKK^+09a]$ 

Antti Jääskeläinen, Mika Katara, Antti Kervinen, Mika Maunumaa, Tuula Pääkkönen, Tommi Takala, and Heikki Virtanen. Automatic gui test generation for smartphone applications - an evaluation. pages 112–122, Vancouver, BC, 2009. cited By 25; Conference of 2009 31st International Conference on Software Engineering, ICSE 2009; Conference Date: 16 May 2009 Through 24 May 2009; Conference Code: 77505.

[JKK<sup>+</sup>09b]

Antti Jääskeläinen, Antti Kervinen, Mika Katara, Antti A. Valmari, and Heikki Virtanen. Synthesizing test models from test cases. 4th International Haifa Verification Conference, HVC 2008, 5394 LNCS:179–193, 2009. cited By 11; Conference of 4th International Haifa Verification Conference, HVC 2008; Conference Date: 27 October 2008 Through 30 October 2008; Conference Code:76574.

[JLW19]

Weina Jiang, Xiaozhe Li, and Xinming Wang. A black-box based script repair method for gui regression test. pages 148–153. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 0; Conference of 7th International Conference on Digital Home, ICDH 2018; Conference Date: 30 November 2018 Through 1 December 2018; Conference Code:144882.

[JN14]

Prabhu Jayagopal and Malmurugan Nagarajan. A novel prioritization algorithm model based test-suite generation using regression testing. *Journal of Computer Science*, 10(2):190–197, 2014. cited By 1.

[JPAB19]

Sadeeq Jan, Annibale Panichella, Andrea Arcuri, and Lionel C. Briand. Automatic generation of tests to exploit xml injection vulnerabilities in web applications. *IEEE Transactions on Software Engineering*, 45(4):335–362, 2019. cited By 8.

[JPM13]

Casper S. Jensen, Mukul R. Prasad, and Anders Møller. Automated testing with targeted event sequence generation. pages 67–77, Lugano, 2013. cited By 142; Conference of 22nd International Symposium on Software Testing and Analysis, ISSTA 2013; Conference Date: 15 July 2013 Through 20 July 2013; Conference Code:98381.

[JRCMWE20]

Andrés Jiménez-Ramírez, Jesús Chacón-Montero, Tomasz Wojdynsky, and J. G. Enríquez. Automated testing in robotic process automation projects. *Journal of Software: Evolution and Process*, 2020. cited By 3.

 $[JSS^+17]$ 

Ma Jun, Liu Sheng, Yue Shengtao, Tao Xianping, and Lu Jian. Leakdaf: An automated tool for detecting leaked activities and fragments of android applications. volume 1, pages 23–32. IEEE Computer Society, 2017. cited By 5; Conference of 41st IEEE Annual Computer Software and Applications Conference, COMP-SAC 2017; Conference Date: 4 July 2017 Through 8 July 2017; Conference Code:130854.

[JWCY09]

Hu Jin, Shuo Wang, Nianwei Chen, and Zhen Ye. Finite state machine for automatic gui testing. Wuhan, 2009. cited By 3; Conference of 2009 International Conference on Computational Intelligence and Software Engineering, CiSE 2009; Conference Date: 11 December 2009 Through 13 December 2009; Conference Code:79559.

[JZ16]

Konrad Jamrozik and Andreas Zeller. Droid mate: A robust and extensible test generator for android. pages 293–294. Association for Computing Machinery, Inc, 2016. cited By 19; Conference of IEEE/ACM International Conference on Mobile Software Engineering and Systems, MobileSoft 2016; Conference Date: 16 May 2016 Through 17 May 2016; Conference Code:122876.

[JZCZ17]

Bo Jiang, Yaoyue Zhang, Wing Kwong Chan, and Zhenyu Zhang. Which factor impacts gui traversal-based test case generation technique most? a controlled experiment on android applications. pages 21–31. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 1; Conference of 17th IEEE International Conference on Software Quality, Reliability and Security, QRS 2017; Conference Date: 25 July 2017 Through 29 July 2017; Conference Code:129990.

[Jä16]

Antti Jääskeläinen. Towards model construction based on test cases and gui extraction. International Conference on Testing Software and Systems, ICTSS, 9976 LNCS:225–230, 2016. cited By 1; Conference of 28th IFIP WG 6.1 International Conference on Testing Software and Systems, ICTSS 2016; Conference Date: 17 October 2016 Through 19 October 2016; Conference Code:185379. Pieter W.M. Koopman, Peter Achten, and Rinus (m ).J. Plasmeijer. Model-based testing of thin-client web applications and navigation input. 10th International Symposium on Practical Aspects of Declarative Languages, PADL 2008, 4902 LNCS:299–315, 2007. cited By 4; Conference of 10th International Symposium on Practical Aspects of Declarative Languages, PADL 2008; Conference Date: 7 January 2008 Through 8 January 2008; Conference Code:71287.

[KAP07]

[KEPE13]

Johannes Keckeis, Jan Peter Eberle, Kurt Promberger, and Pascal Erhart. Automated testing of erp gui: A cost-benefit analysis. volume 4, pages 143–151. Springer Heidelberg, 2013. cited By 1. Jouko Kaasila, Denzil Ferreira, Vassilis Kostakos, and Timo Ojala. Testdroid: Automated remote ui testing on android. Ulm, 2012.

[KFKO12]

Testdroid: Automated remote ui testing on android. Ulm, 2012. cited By 45; Conference of 11th International Conference on Mobile and Ubiquitous Multimedia, MUM 2012; Conference Date: 4 December 2012 Through 6 December 2012; Conference Code:94676.

[KG96]

David J. Kasik and Harry G. George. Toward automatic generation of novice user test scripts. pages 244–251, Vancouver, BC, Can, 1996. ACM, New York. cited By 44; Conference of Proceedings of the 1996 Conference on Human Factors in Computing Systems, CHI 96; Conference Date: 13 April 1996 Through 18 April 1996; Conference Code:44819.

[KH08]

Oh-hyun Kwon and Sunmyung Myoung Hwang. Mobile gui testing tool based on image flow. pages 508–512, Portland, OR, 2008. cited By 8; Conference of 7th IEEE/ACIS International Conference on Computer and Information Science, IEEE/ACIS ICIS 2008; Conference Date: 14 May 2008 Through 16 May 2008; Conference Code: 73174

[KK14]

Harvinder Kaur and Puneet Jai Kaur. A gui based unit testing technique for antipattern identification. pages 779–782. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 3; Conference of 5th International Conference on Confluence 2014 - The Next Generation Information Technology Summit; Conference Date: 25 September 2014 Through 26 September 2014; Conference Code:109107.

[KK16]

Antonia Kresse and Peter M. Krüse. Development and maintenance efforts testing graphical user interfaces: A comparison. pages 52–58. Association for Computing Machinery, Inc, 2016. cited By 4; Conference of 7th International Workshop on Automating Test Case Design, Selection, and Evaluation, A-TEST 2016; Conference Date: 18 November 2016; Conference Code:124940.

[KKM<sup>+</sup>06]

Mika Katara, Antti Kervinen, Mika Maunumaa, Tuula Pääkkönen, and Mikko Satama. Towards deploying modelbased testing with a domain-specific modeling approach. pages 81–89, Windsor, 2006. cited By 19; Conference of 1st Testing: Academic and Industrial Conference - Practice and Research Techniques, TAIC PART 2006; Conference Date: 29 August 2006 Through 31 August 2006; Conference Code:87415.

[KL14]

Dea-kwang Kim and Lee-sub Lee. Reverse engineering from exploratory testing to specification-based testing. *International Journal of Software Engineering and its Applications*, 8(11):197–208, 2014. cited By 5.

[KLH00]

David Chenho Kung, Chienhung Liu, and Pei Hsia. Object-oriented web test model for testing web applications. pages 537–542, Taipei, Taiwan, 2000. IEEE, Los Alamitos, CA, United States. cited By 33; Conference of 2000 IEEE 24th Annual International Computer Software and Applications Conference (COMP-SAC 2000); Conference Date: 25 October 2000 Through 27 October 2000; Conference Code:57757.

[KM16]

Emily Kowalczyk and Atif M. Memon. Extending manual gui testing beyond defects by building mental models of software behavior. pages 35–41. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 3; Conference of 30th IEEE/ACM International Conference on Automated Software Engineering Workshops, ASEW 2015; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:119822.

[KPD<sup>+</sup>19]

Taeyeon Ki, Chang-min Park, Karthik Dantu, Steven Y. Ko, and Lukasz Ziarek. Mimic: Ui compatibility testing system for android apps. volume 2019-May, pages 246–256. IEEE Computer Society, 2019. cited By 3; Conference of 41st IEEE/ACM International Conference on Software Engineering, ICSE 2019; Conference Date: 25 May 2019 Through 31 May 2019; Conference Code:151191.

[KR17]

Claus Klammer and Rudolf Ramler. A journey from manual testing to automated test generation in an industry project. pages 591–592. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 8; Conference of 2017 IEEE International Conference on Software Quality, Reliability and Security Companion, QRS-C 2017; Conference Date: 25 July 2017 Through 29 July 2017; Conference Code:129875.

[KRS16]

Claus Klammer, Rudolf Ramler, and Heinz Stummer. Harnessing automated test case generators for gui testing in industry. pages 227–234. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 9; Conference of 42nd Euromicro Conference on Software Engineering and Advanced Applications, SEAA 2016

; Conference Date: 31 August 2016 Through 2 September 2016; Conference Code:124363. [KS13] Tulsi Kushwaha and Om Prakash Sangwan. Prediction of usability level of test cases for gui based application using fuzzy logic. volume 2013, pages 83–86, Noida, 2013. Institution of Engineering and Technology. cited By 4; Conference of 4th International Conference on the Next Generation Information Technology Summit, Confluence 2013; Conference Date: 26 September 2013 Through 27 September 2013; Conference Code:105539. [KSCB19] Onur Kilincceker, Alper Silistre, Moharram Challenger, and Fevzi Belli. Random test generation from regular expressions for graphical user interface (gui) testing. pages 170-176. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 4; Conference of 19th IEEE International Conference on Software Quality, Reliability and Security Companion, QRS-C 2019; Conference Date: 22 July 2019 Through 26 July 2019; Conference Code:152544.  $[KTN^+15]$ Pavneet Singh Kochhar, Ferdian Thung, Nachiappan Nagappan, Thomas Zimmermann, and David Lo. Understanding the test automation culture of app developers. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 83; Conference of 8th IEEE International Conference on Software Testing, Verification and Validation, ICST 2015; Conference Date: 13 April 2015 Through 17 April 2015; Conference Code:112251. [Kul12] Andres Kull. Automatic gui model generation: State of the art. pages 207-212, Dallas, TX, 2012. cited By 10; Conference of 23rd IEEE International Symposium on Software Reliability Engineering Workshops, ISSREW 2012; Conference Date: 27 November 2012 Through 30 November 2012; Conference Code:95287. [K0] Yavuz Köroğlu and Alper Şen. Functional test generation from ui test scenarios using reinforcement learning for android applications. Software Testing Verification and Reliability, 2020. cited By 0.  $[K^{+}18]$ Yavuz Köroğlu, Alper Şen, Ozlem Muslu, Yunus Mete, Ceyda Ulker, Tolga Tanriverdi, and Yunus Dönmez. Qbe: Qlearningbased exploration of android applications. pages 105–115. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 20; Conference of 11th IEEE International Conference on Software Testing, Verification and Validation, ICST 2018; Conference Date: 9 April 2018 Through 13 April 2018; Conference Code:136754. [LA19] Eduardo Luna and Omar El Ariss. Edroid: A mutation tool for android apps. pages 99–108. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 4; Conference of 6th International Conference in Software Engineering Research and Innovation, CONISOFT 2018; Conference Date: 24 October 2018 Through 26 October 2018; Conference Code:145502. [LAF13] Grischa Liebel, Emil Alégroth, and Robert Feldt.

practice in gui-based system and acceptance testing: An industrial multiple-case study. pages 17–24, Santander, 2013. cited By 9; Conference of 39th Euromicro Conference Series on Software Engineering and Advanced Applications, SEAA 2013; Conference

Date: 4 September 2013 Through 6 September 2013; Conference Code:101124.

[LBJALV18]

Santiago Linan, Laura Bello-Jiménez, Maria Arevalo, and Mario Linares-Vásquez. Automated extraction of augmented models for android apps. pages 549–553. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 2; Conference of 34th IEEE International Conference on Software Maintenance and Evolution, ICSME 2018; Conference Date: 23 September 2018 Through 29 September 2018; Conference Code:142437.

 $[LBL^{+}18]$ 

Tien Duy B. Le, Lingfeng Bao, David Lo, Debin Gao, and Li Li. Towards mining comprehensive android sandboxes. volume 2018-December, pages 51–60. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 2; Conference of 23rd International Conference on Engineering of Complex Computer Systems, ICECCS 2018; Conference Date: 12 December 2018 Through 14 December 2018; Conference Code:144191.

[LCH18]

Chienhung Liu, Woei Kae Chen, and Shuhang Ho. Nfs: An algorithm for avoiding restarts to improve the efficiency of crawling android applications. volume 2, pages 69–74. IEEE Computer Society, 2018. cited By 1; Conference of 42nd IEEE Computer Software and Applications Conference, COMPSAC 2018; Conference Date: 23 July 2018 Through 27 July 2018; Conference Code:140235.

[LCRS13]

Maurizio Leotta, Diego Clerissi, Filippo Ricca, and Cristiano Spadaro. Comparing the maintainability of selenium webdriver test suites employing different locators: A case study. pages 53–58, Lugano, 2013. cited By 23; Conference of 1st International Workshop on Joining AcadeMiA and Industry Contributions to Testing Automation, JAMAICA 2013; Conference Date: 15 July 2013 Through 15 July 2013; Conference Code:98382.

[LCRT13]

Maurizio Leotta, Diego Clerissi, Filippo Ricca, and Paolo Tonella. Capture-replay vs. programmable web testing: An empirical assessment during test case evolution. pages 272–281, Koblenz, 2013. IEEE Computer Society. cited By 62; Conference of 20th Working Conference on Reverse Engineering, WCRE 2013; Conference Date: 14 October 2013 Through 17 October 2013; Conference Code:102314.

[LCV13a]

Gențiana Ioana Lațiu, Octavian Augustin Creț, and Lucia Văcariu. Evoguitest - a graphical user interface testing framework based on evolutionary algorithms. pages 75–82, Vilamoura, Algarve, 2013. cited By 1; Conference of 5th International Joint Conference on Computational Intelligence, IJCCI 2013; Conference Date: 20 September 2013 Through 22 September 2013; Conference Code:100693.

[LCV13b]

Gențiana Ioana Lațiu, Octavian Augustin Creț, and Lucia Văcariu. Graphical user interface testing using evolutionary algorithms. Lisbon, 2013. cited By 0; Conference of 8th Iberian Conference on Information Systems and Technologies, CISTI 2013; Conference Date: 19 June 2013 Through 22 June 2013; Conference Code:100955.

 $[LCW^+17]$ Xuandong Li, Nana Chang, Yan Wang, Haohua Huang, Yu Pei, Linzhang Wang, and Xuandong Li. Atom: Automatic maintenance of gui test scripts for evolving mobile applications. pages 161-171. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 24; Conference of 10th IEEE International Conference on Software Testing, Verification and Validation, ICST 2017; Conference Date: 13 March 2017 Through 17 March 2017; Conference Code:127845. [LCY<sup>+</sup>09] Han Li, Feng Chen, Hongji Yang, He Guo, William Cheng Chung Chu, and Yuansheng Yang. An ontology-based approach for gui testing. volume 1, pages 632–633, Seattle, WA, 2009. cited By 11; Conference of 2009 33rd Annual IEEE International Computer Software and Applications Conference, COMPSAC 2009; Conference Date: 20 July 2009 Through 24 July 2009; Conference Code:78413. [LCYL14] Ying Dar Jason Lin, Edward T.H. Chu, Shangche Yu, and Yuan Cheng Lai Lai. Improving the accuracy of automated gui testing for embedded systems. IEEE Software, 31(1):39-45, 2014. cited By 18.  $[LGC^+11]$ Han Li, He Guo, Feng Chen, Hongji Yang, and Yuansheng Yang. Using ontology to generate test cases for gui testing. *International* Journal of Computer Applications in Technology, 42(2-3):213–224, 2011. cited By 7. [LH12] Lu Lu and Ying Huang. Automated gui test case generation. pages 582-585, Nanjing, 2012. cited By 4; Conference of 2012 International Conference on Computer Science and Service System, CSSS 2012; Conference Date: 11 August 2012 Through 13 August 2012; Conference Code:95196. [LHS14] Lan Lin, Jia He, and Fengguang Song. Usage modeling through sequence enumeration for automated statistical testing of a gui application. pages 82–85. IEEE Computer Society, 2014. cited By 1; Conference of 2014 5th IEEE International Conference on Software Engineering and Service Science, ICSESS 2014; Conference Date: 27 June 2014 Through 29 June 2014; Conference Code:108800. [LHX15] Lan Lin, Jia He, and Yufeng Xue. An automated testing framework for statistical testing of gui applications. volume 2015-January, pages 72-79. Knowledge Systems Institute Graduate School, 2015. cited By 0; Conference of 27th International Conference on Software Engineering and Knowledge Engineering, SEKE 2015; Conference Date: 6 July 2015 Through 8 July 2015; Conference Code:121351. [Liu19] Chienhung Liu. A compatibility testing platform for android multimedia applications. Multimedia Tools and Applications, 78(4):4885–4904, 2019. cited By 1. [LJM19] Junwei Lin, Reyhaneh Jabbarvand, and Sam Malek. Test trans-

fer across mobile apps through semantic mapping. pages 42–53. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 7; Conference of 34th IEEE/ACM International Conference on Automated Software Engineering, ASE 2019; Conference

Date: 10 November 2019 Through 15 November 2019; Conference Code:156781.

[LKPH96]

D. C. Lin, Jim R. Klein, R. D. Pendley, and S. L. Hoge. Use of xrunner for automation. volume 32, pages 689–696, San Diego, CA, USA, 1996. Instrument Society of America, Research Triangle Park, NC, United States. cited By 1; Conference of Proceedings of the 1996 International Telemetering Conference, ITC; Conference Date: 28 October 1996 Through 31 October 1996; Conference Code: 45601.

 $[LLB^+14]$ 

Chieh Jan Mike Liang, Nicholas D. Lane, Niels Brouwers, Li Zhang, Börje F. Karlsson, Hao Liu, Yan Liu, Jun Tang, Xiang Shan, Ranveer Chandra, and Feng Zhao. Caiipa: Automated large-scale mobile app testing through contextual fuzzing. pages 519–530. Association for Computing Machinery, 2014. cited By 59; Conference of 20th ACM Annual International Conference on Mobile Computing and Networking, MobiCom 2014; Conference Date: 7 September 2014 Through 11 September 2014; Conference Code:108046.

 $[LLC^+14]$ 

Chienhung Liu, Chienyu Lu, Shanjen Cheng, Koanyuh Chang, Yungchia Hsiao, and Wengming Chu. Capture-replay testing for android applications. pages 1129–1132, Taichung, 2014. IEEE Computer Society. cited By 29; Conference of 2nd International Symposium on Computer, Consumer and Control, IS3C 2014; Conference Date: 10 June 2014 Through 12 June 2014; Conference Code:106413.

[LLM10]

Xiaohui Liu, Yuqing Lan, and Like Ma. Design and implementation of automated testing framework for linux software gui testing. Chengdu, 2010. cited By 0; Conference of 2010 6th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM 2010; Conference Date: 23 September 2010 Through 25 September 2010; Conference Code:82436.

[LM16]

Rui Li and Shilong Ma. The implementation of user interface autogenerate for spacecraft automatic tests based on ontology. pages 2676–2681. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 2; Conference of 12th International Conference on Fuzzy Systems and Knowledge Discovery, FSKD 2015; Conference Date: 15 August 2015 Through 17 August 2015; Conference Code:119123.

[LQCL14]

Ang Li, Zishan Qin, Mingsong Chen, and Jing Liu. Adautomation: An activity diagram based automated gui testing framework for smartphone applications. pages 68–77. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 15; Conference of 8th International Conference on Software Security and Reliability, SERE 2014; Conference Date: 30 June 2014 Through 2 July 2014; Conference Code:114566.

[LR19]

Duling Lai and Julia Rubin. Goal-driven exploration for android applications. pages 115–127. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 3; Conference of 34th IEEE/ACM International Conference on Automated Software Engineering,

ASE 2019; Conference Date: 10 November 2019 Through 15 November 2019: Conference Code:156781. [LRCL14] Ying Dar Jason Lin, Jose F. Rojas, Edward T.H. Chu, and Yuan Cheng Lai Lai. On the accuracy, efficiency, and reusability of automated test oracles for android devices. IEEE Transactions on Software Engineering, 40(10):957–970, 2014. cited By 34. [LRRG11] Esteban Luna Robles, Gustavo H. Rossi, and Irene Garrigós. Webspec: A visual language for specifying interaction and navigation requirements in web applications. Requirements Engineering, 16(4):297-321, 2011. cited By 20. [LSHN17] Meng Luo, Oleksii Starov, Nima Honarmand, and Nick Nikiforakis. Hindsight: Understanding the evolution of ui vulnerabilities in mobile browsers. pages 149–162. Association for Computing Machinery, 2017. cited By 14; Conference of 24th ACM SIGSAC Conference on Computer and Communications Security, CCS 2017 ; Conference Date: 30 October 2017 Through 3 November 2017; Conference Code:131467. [LSJJ20] Hui Liu, Mingzhu Shen, Jiahao Jin, and Yanjie Jiang. Automated classification of actions in bug reports of mobile apps. pages 128-140. Association for Computing Machinery, Inc, 2020. cited By 0; Conference of 29th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2020; Conference Date: 18 July 2020 Through 22 July 2020; Conference Code:161847. [LSRT15] Maurizio Leotta, Andrea Stocco, Filippo Ricca, and Paolo Tonella. Using multi-locators to increase the robustness of web test cases. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 33; Conference of 8th IEEE International Conference on Software Testing, Verification and Validation, ICST 2015; Conference Date: 13 April 2015 Through 17 April 2015. [LSS03] Charles Lowell and Jeremy Stell-Smith. Successful automation of gui driven acceptance testing. International Conference on Extreme Programming and Agile Processes in Software Engineering, XP, 2675:331-333, 2003. cited By 9; Conference of 4th International Conference on Extreme Programming and Agile Processes in Software Engineering, XP 2003; Conference Date: 25 May 2003 Through 29 May 2003; Conference Code:134669. [LTX11] Jinhua Li, Hengxiang Tian, and Dandan Xing. Clustering user session data for web applications test. Journal of Computational Information Systems, 7(9):3174-3181, 2011. cited By 1. [LV15] Mario Linares-Vásquez. Enabling testing of android apps. volume 2, pages 763–765. IEEE Computer Society, 2015. cited By 12; Conference of 37th IEEE/ACM International Conference on Software Engineering, ICSE 2015; Conference Date: 16 May 2015 Through 24 May 2015; Conference Code:116104. [LW05] Yachai Limpiyakorn and Petnamkang Wongsuttipakorn. Gui test case generation from uml. volume 1, pages 323-329, Las Vegas, NV, 2005. cited By 0; Conference of 2005 International Conference on Software Engineering Research and Practice, SERP'05; Conference Date: 27 June 2005 Through 30 June 2005; Conference Code:75428.

[LWC17]

Junwei Lin, Farn Wang, and Paul Chu. Using semantic similarity in crawling-based web application testing. pages 138–148. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 5; Conference of 10th IEEE International Conference on Software Testing, Verification and Validation, ICST 2017; Conference Date: 13 March 2017 Through 17 March 2017; Conference Code:127845. Min Li, Jason Wang, and Lamar Damata. Tao project: An intuitive application ui test toolset. pages 796–800, Las Vegas, NV, 2009. cited By 0; Conference of 6th International Conference on Information Technology: New Generations, ITNG 2009; Conference Date: 27 April 2009 Through 29 April 2009; Conference Code:79848.

[LWD09]

 $[LWL^+17]$ 

Wing Lam, Zhengkai Wu, Dengfeng Li, Wenyu Wang, Haibing Zheng, Hui Luo, Peng Yan, Yuetang Deng, and Tao Xie. Record and replay for android: Are we there yet in industrial cases? volume Part F130154, pages 854–859. Association for Computing Machinery, 2017. cited By 16; Conference of 11th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE 2017; Conference Date: 4 September 2017 Through 8 September 2017; Conference Code:130154.

[LWSY09]

Li Li, Dayong Wang, Xiangheng Shen, and Mingli Yang. A method for combinatorial explosion avoidance of ai planner and the application on test case generation. Wuhan, 2009. cited By 2; Conference of 2009 International Conference on Computational Intelligence and Software Engineering, CiSE 2009; Conference Date: 11 December 2009 Through 13 December 2009; Conference Code:79559.

[LWY<sup>+</sup>18]

Huijuan Lu, Li Wang, Minchao Ye, Ke Yan, and Qun Jin. Dnn-based image classification for software gui testing. pages 1818–1823. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 4th IEEE SmartWorld, 15th IEEE International Conference on Ubiquitous Intelligence and Computing, Advanced and Trusted Computing, Scalable Computing and Communications, Cloud and Big Data Computing, Internet of People and Smart City Innovations, Smart-World/UIC/ATC/ScalCom/CBDCom/IoP/SCI 2018; Conference Date: 7 October 2018 Through 11 October 2018; Conference Code:143372.

[LX11]

Jinhua Li and Dandan Xing. User session data based web applications test with cluster analysis. *International Conference on Advanced Research on Computer Science and Information Engineering, CSIE*, 152 CCIS(PART 1):415–421, 2011. cited By 4; Conference of International Conference on Advanced Research on Computer Science and Information Engineering, CSIE 2011; Conference Date: 21 May 2011 Through 22 May 2011; Conference Code:85618.

 $[{\rm LYGC17}]$ 

Yuanchun Li, Ziyue Yang, Yao Guo, and Xiangqun Chen. Droidbot: A lightweight ui-guided test input generator for android. pages 23–26. Institute of Electrical and Electronics Engineers Inc.,

2017. cited By 63; Conference of 39th IEEE/ACM International Conference on Software Engineering Companion, ICSE-C 2017; Conference Date: 20 May 2017 Through 28 May 2017; Conference Code:128913.

[LYGC19]

Yuanchun Li, Ziyue Yang, Yao Guo, and Xiangqun Chen. Humanoid: A deep learning-based approach to automated blackbox android app testing. pages 1070–1073. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 11; Conference of 34th IEEE/ACM International Conference on Automated Software Engineering, ASE 2019; Conference Date: 10 November 2019 Through 15 November 2019; Conference Code:156781.

[LZC17]

Edmund S.L. Lam, Peilun Zhang, and Bor Yuh Evan Chang. Chimpcheck: Property-based randomized test generation for interactive apps. pages 58–77. Association for Computing Machinery, Inc, 2017. cited By 0; Conference of 2017 ACM SIGPLAN International Symposium on New Ideas, New Paradigms, and Reflections on Programming and Software, Onward! 2017; Conference Date: 25 October 2017 Through 27 October 2017; Conference Code:131732.

[LZZJ20]

Xudong Li, Dajun Zhou, Like Zhang, and Yanqing Jing. Humanlike ui automation through automatic exploration. pages 47–53. Association for Computing Machinery, 2020. cited By 0; Conference of 2nd International Conference on Big Data and Artificial Intelligence, ISBDAI 2020; Conference Date: 15 October 2020 Through 16 October 2020; Conference Code:166197.

[MA07]

Kenneth I. Magel and Izzat Mahmoud Alsmadi. Gui structural metrics and testability testing. pages 91–95. ACTA Press, 2007. cited By 2; Conference of 11th IASTED International Conference on Software Engineering and Applications, SEA 2007; Conference Date: 19 November 2007 Through 21 November 2007; Conference Code:117540.

[MA18]

Ahmed Mateen and Khizar Abbas. Optimization of model based functional test case generation for android applications. pages 90–95. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 0; Conference of 2017 European Conference on Pattern Languages of Programs, EuroPLoP; Conference Date: 21 September 2017 Through 22 September 2017; Conference Code:137381.

[MBHN03]

Atif M. Memon, Ishan Banerjee, Nada Hashmi, and Adithya Nagarajan. Dart: A framework for regression testing "nightly/daily builds" of gui applications. pages 410–419, Amsterdam,, 2003. IEEE Computer Society. cited By 40; Conference of International Conference on Software Maintenance; Conference Date: 22 September 2003 Through 26 September 2003; Conference Code:61705.

[MBMM16]

Nariman Mirzaei, Hamid Bagheri, Riyadh Mahmood, and Sam Malek. Sig-droid: Automated system input generation for android applications. pages 461–471. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 32; Conference of 26th IEEE International Symposium on Software Reliability Engineering, ISSRE

2015; Conference Date: 2 November 2015 Through 5 November 2015; Conference Code:119083.

[MBN03]

Atif M. Memon, Ishan Banerjee, and Adithya Nagarajan. Gui ripping: Reverse engineering of graphical user interfaces for testing. pages 260–269, Victoria, BC, 2003. cited By 116; Conference of Tenth Working Conference on Reverse Engineering; Conference Date: 13 November 2003 Through 16 November 2003; Conference Code:62035.

[MBNR13]

Atif M. Memon, Ishan Banerjee, Bao N. Nguyen, and Bryan Robbins. The first decade of gui ripping: Extensions, applications, and broader impacts. pages 11–20, Koblenz, 2013. cited By 20; Conference of 20th Working Conference on Reverse Engineering, WCRE 2013; Conference Date: 14 October 2013 Through 17 October 2013; Conference Code:102314.

[MBVD08]

Ali Mesbah, Engin Bozdag, and Arie Van Van Deursen. Crawling ajax by inferring user interface state changes. pages 122–134, Yorktown Heights, NY, 2008. cited By 133; Conference of 8th International Conference on Web Engineering, ICWE 2008; Conference Date: 14 July 2008 Through 18 July 2008; Conference Code:73518.

[MC13]

Atif M. Memon and Myra B. Cohen. Automated testing of gui applications: Models, tools, and controlling flakiness. pages 1479–1480, San Francisco, CA, 2013. cited By 31; Conference of 2013 35th International Conference on Software Engineering, ICSE 2013; Conference Date: 18 May 2013 Through 26 May 2013; Conference Code:100317.

[McM09]

Chris McMahon. History of a large test automation project using selenium. pages 363–368, Chicago, IL, 2009. cited By 7; Conference of 2009 Agile Conference, AGILE 2009; Conference Date: 24 August 2009 Through 28 August 2009; Conference Code:78441.

[MCM19]

Mostafa Mohammed, Haipeng Cai, and Na Meng. An empirical comparison between monkey testing and human testing (wip paper). pages 188–192. Association for Computing Machinery, 2019. cited By 2; Conference of 20th ACM SIGPLAN/SIGBED International Conference on Languages, Compilers, and Tools for Embedded Systems, LCTES 2019, co-located with PLDI 2019; Conference Date: 23 June 2019; Conference Code:149786.

[MD95]

Roy A. Maxion and Aimee L. DeChambeau. Dependability at the user interface. pages 528–535, Pasadena, CA, USA, 1995. IEEE, Piscataway, NJ, United States. cited By 6; Conference of Proceedings of the 25th International Symposium on Fault-Tolerant Computing; Conference Date: 27 June 1995 Through 30 June 1995; Conference Code:43520.

[MDA15]

Aliaksei Miniukovich and Antonella De Angeli. Computation of interface aesthetics. volume 2015-April, pages 1163–1172. Association for Computing Machinery, 2015. cited By 34; Conference of 33rd Annual CHI Conference on Human Factors in Computing Systems, CHI 2015; Conference Date: 18 April 2015 Through 23 April 2015; Conference Code:116824.

 $[MGB^+16]$ 

[ME20]André Augusto Menegassi and Andre Takeshi Endo. Automated tests for cross-platform mobile apps in multiple configurations. *IET Software*, 14(1):27–38, 2020. cited By 0.  $[MEAR^+16]$ Mirella Martínez, Anna I. Esparcia-Alcazar, Urko Rueda, Tanja E.J. Vos, and Carlos C. Ortega. Automated localisation testing in industry with test. International Conference on Testing Software and Systems, ICTSS, 9976 LNCS:241-248, 2016. cited By 4; Conference of 28th IFIP WG 6.1 International Conference on Testing Software and Systems, ICTSS 2016; Conference Date: 17 October 2016 Through 19 October 2016; Conference Code:185379.  $[MEK^+12]$ Riyadh Mahmood, Naeem Esfahani, Thabet Kacem, Nariman Mirzaei, Sam Malek, and Angelos Stavrou. A whitebox approach for automated security testing of android applications on the cloud. pages 22–28, Zurich, 2012. cited By 80; Conference of 2012 7th International Workshop on Automation of Software Test, AST 2012; Conference Date: 2 June 2012 Through 3 June 2012; Conference Code:91305. [Mem04]Atif M. Memon. Using tasks to automate regression testing of guis. pages 477–482, Innsbruck, 2004. cited By 8; Conference of Proceedings of the IASTED International Conference on Artificial Intelligence and Applications (as part of the 22nd IASTED International Multi-Conference on Applied Informatics; Conference Date: 16 February 2004 Through 18 February 2004; Conference Code:64123. [Mem06]Atif M. Memon. Employing user profiles to test a new version of a gui component in its context of use. Software Quality Journal, 14(4):359–377, 2006. cited By 6. [Mem07]Atif M. Memon. An event-flow model of gui-based applications for testing. Software Testing Verification and Reliability, 17(3):137-157, 2007. cited By 193. [Mem08] Atif M. Memon. Automatically repairing event sequence-based gui test suites for regression testing. ACM Transactions on Software Engineering and Methodology, 18(2), 2008. cited By 97. [Mes03]Gerard Meszaros. Agile regression testing using record playback. pages 353–360, Anaheim, CA, 2003. cited By 13; Conference of 18th Annual ACM SIGPLAN Conference on Object-Oriented Programming, Systems, Languages, and Applications, OOPSLA'03: Conference Date: 26 October 2003 Through 30 October 2003; Conference Code:83795. [MF20] Euler Horta Marinho and Eduardo Costa Figueiredo. Platool: A functional test generation tool for mobile applications. pages 548–553. Association for Computing Machinery, 2020. cited By 0; Conference of 34th Brazilian Symposium on Software Engineering, SBES 2020; Conference Date: 21 October 2020 Through 23 October 2020; Conference Code:165927. [MFZL06] Ye Mao, Boqing Qin Feng, Huang Zhenfang, and Zhu Li. Important usage paths selection for gui software testing. Information Technology Journal, 5(4):648-654, 2006. cited By 4.

Nariman Mirzaei, Joshua Garcia, Hamid Bagheri, Alireza Sadeghi, and Sam Malek. Reducing combinatorics in gui testing of android

applications. volume 14-22-May-2016, pages 559–570. IEEE Computer Society, 2016. cited By 72; Conference of 2016 IEEE/ACM 38th IEEE International Conference on Software Engineering, ICSE 2016; Conference Date: 14 May 2016 Through 22 May 2016; Conference Code:121623.

[MH15]

Sonal Mahajan and William G.J. Halfond. Detection and localization of html presentation failures using computer vision-based techniques. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 29; Conference of 8th IEEE International Conference on Software Testing, Verification and Validation, ICST 2015; Conference Date: 13 April 2015 Through 17 April 2015; Conference Code:112251.

 $[MHH^{+}19]$ 

Yun Ma, Yangyang Huang, Ziniu Hu, Xusheng Xiao, and Xuanzhe Liu. Paladin: Automated generation of reproducible test cases for android apps. pages 99–104. Association for Computing Machinery, Inc, 2019. cited By 8; Conference of 20th International Workshop on Mobile Computing Systems and Applications, HotMobile 2019; Conference Date: 27 February 2019 Through 28 February 2019; Conference Code:145670.

[MHJ16]

Ke Mao, Mark Harman, and Yue Jia. Sapienz: Multi-objective automated testing for android applications. pages 94–105. Association for Computing Machinery, Inc, 2016. cited By 208; Conference of 25th International Symposium on Software Testing and Analysis, ISSTA 2016; Conference Date: 18 July 2016 Through 20 July 2016; Conference Code:122744.

[MHJ17]

Ke Mao, Mark Harman, and Yue Jia. Crowd intelligence enhances automated mobile testing. pages 16–26. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 26; Conference of 32nd IEEE/ACM International Conference on Automated Software Engineering, ASE 2017; Conference Date: 30 October 2017 Through 3 November 2017; Conference Code:132671.

[MKDE19]

M. Medhat Kamal, Saad Mohamed Darwish, and Ahmed M. Elfatatry. Enhancing the automation of gui testing. pages 66–70. Association for Computing Machinery, 2019. cited By 0; Conference of 8th International Conference on Software and Information Engineering, ICSIE 2019; Conference Date: 9 April 2019 Through 12 April 2019; Conference Code:148824.

 $[MKS^+16]$ 

Nor Aiza Moketar, Massila Binti Kamalrudin, Safiah Sidek, Mark Robinson, and John Grundy. Testmereq: Generating abstract tests for requirements validation. pages 39–45. Association for Computing Machinery, Inc, 2016. cited By 7; Conference of 3rd International Workshop on Software Engineering Research and Industrial Practice, SER and IP 2016; Conference Date: 17 May 2016; Conference Code:121787.

 $[MLVBC^{+}16]$ 

Kevin Moran, Mario Linares-Vásquez, Carlos Eduardo Bernal-Cárdenas, Christopher Vendome, and Denys Poshyvanyk. Automatically discovering, reporting and reproducing android application crashes. pages 33–44. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 93; Conference of 9th IEEE International Conference on Software Testing, Verification and Val-

idation, ICST 2016; Conference Date: 10 April 2016 Through 15 April 2016; Conference Code:122841. [MLVP17a] Kevin Moran, Mario Linares-Vásquez, and Denys Poshyvanyk. Automated gui testing of android apps: From research to practice. pages 505–506. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 7; Conference of 39th IEEE/ACM International Conference on Software Engineering Companion, ICSE-C 2017; Conference Date: 20 May 2017 Through 28 May 2017; Conference Code:128913. [MLVP17b] Kevin Moran, Mario Linares-Vásquez, and Denys Poshyvanyk. Automated gui testing of android apps: From research to practice. page 648. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 2; Conference of 32nd IEEE International Conference on Software Maintenance and Evolution, ICSME 2016 Conference Date: 2 October 2016 Through 10 October 2016; Conference Code:125963. [MM08] Scott McMaster and Atif M. Memon. Call-stack coverage for gui test suite reduction. IEEE Transactions on Software Engineering, 34(1):99-115, 2008. cited By 70. [MMB14] Quentin Mayo, Ryan Michaels, and Renee C. Bryce. Test suite reduction by combinatorial-based coverage of event sequences, pages 128–132, Cleveland, OH, 2014. IEEE Computer Society. cited By 8; Conference of 7th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2014; Conference Date: 31 March 2014 Through 4 April 2014; Conference Code:105862. [MMM14]Riyadh Mahmood, Nariman Mirzaei, and Sam Malek. Evodroid: Segmented evolutionary testing of android apps. volume 16-21-November-2014, pages 599-609. Association for Computing Machinery, 2014. cited By 162; Conference of 22nd ACM SIGSOFT International Symposium on the Foundations of Software Engineering, FSE 2014; Conference Date: 16 November 2014 Through 21 November 2014; Conference Code:109032. [MN10] Atif M. Memon and Bao N. Nguyen. Advances in automated model-based system testing of software applications with a gui front-end. Advances in Computers, 80(C):121-162, 2010. cited By [MNX05] Atif M. Memon, Adithya Nagarajan, and Qing Xie. Automating regression testing for evolving gui software. Journal of Software Maintenance and Evolution, 17(1 SPEC. ISS.):27-64, 2005. cited [MOH17] Chafik Meniar, Florence Opalvens, and Sylvain Hall? Runtime verification of user interface guidelines in mobile devices. 17th International Conference on Runtime Verification, RV 2017, 10548 LNCS:410-415, 2017. cited By 0; Conference of 17th Interna-

[Mol12]

Code:197919.

Arthur Jozsef Molnar. An initial study on ideal gui test case replayability. pages 376–381, Cluj-Napoca, 2012. cited By 0; Confer-

tional Conference on Runtime Verification, RV 2017; Conference Date: 13 September 2017 Through 16 September 2017; Conference

ence of 2012 18th IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2012; Conference Date: 24 May 2012 Through 27 May 2012; Conference Code:91781. [MP08] Rodrigo M.L.M. Moreira and Ana C.R. Paiva. Visual abstract notation for gui modelling and testing: Van4guim. volume SE, pages 104-111, Porto, 2008. cited By 12; Conference of 3rd International Conference on Software and Data Technologies, ICSOFT 2008; Conference Date: 5 July 2008 Through 8 July 2008; Conference Code:74309. [MP11] Ali Mesbah and Mukul R. Prasad. Automated cross-browser compatibility testing. pages 561–570, Waikiki, Honolulu, HI, 2011. cited By 85; Conference of 33rd International Conference on Software Engineering, ICSE 2011; Conference Date: 21 May 2011 Through 28 May 2011; Conference Code:85380. [MP13] Tiago Monteiro and Ana C.R. Paiva. Pattern based gui testing modeling environment. pages 140–143, Luxembourg, 2013. cited By 11; Conference of IEEE 6th International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2013; Conference Date: 18 March 2013 Through 20 March 2013; Conference Code:99045. [MP14a] Rodrigo M.L.M. Moreira and Ana C.R. Paiva. A gui modeling dsl for pattern-based gui testing paradigm. pages 126–135, Lisbon, 2014. SciTePress. cited By 15; Conference of 9th International Conference on Evaluation of Novel Approaches to Software Engineering, ENASE 2014; Conference Date: 28 April 2014 Through 30 April 2014; Conference Code:105635. [MP14b] Rodrigo M.L.M. Moreira and Ana C.R. Paiva. Pbgt tool: An integrated modeling and testing environment for pattern-based gui testing. pages 863–866. Association for Computing Machinery, Inc, 2014. cited By 22; Conference of 29th ACM/IEEE International Conference on Automated Software Engineering, ASE 2014; Conference Date: 15 September 2014 Through 19 September 2014; Conference Code:114557. [MP14c] Rodrigo M.L.M. Moreira and Ana C.R. Paiva. Towards a pattern language for model-based gui testing. volume 09-13-July-2014. Association for Computing Machinery, 2014. cited By 0; Conference of 19th European Conference on Pattern Languages of Programs, EuroPLoP 2014; Conference Date: 9 July 2014 Through 13 July 2014; Conference Code:118346. [MP15] Inês Coimbra Morgado and Ana C.R. Paiva. Test patterns for android mobile applications. volume 08-12-July-2015. Association for Computing Machinery, 2015. cited By 1; Conference of 20th European Conference on Pattern Languages of Programs, Euro-PLoP 2015; Conference Date: 8 July 2015 Through 12 July 2015; Conference Code:119317. [MP16a] Inês Coimbra Morgado and Ana C.R. Paiva. Impact of execution modes on finding android failures. volume 83, pages 284–291. Elsevier B.V., 2016. cited By 6; Conference of 7th International Conference on Ambient Systems, Networks and Technologies, ANT 2016 and the 6th International Conference on Sustainable Energy

[MPNHGC+15]

Information Technology, SEIT 2016; Conference Date: 23 May 2016 Through 26 May 2016; Conference Code:121607. [MP16b] Inês Coimbra Morgado and Ana C.R. Paiva. The impact tool: Testing ui patterns on mobile applications. pages 876–881. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 20; Conference of 30th IEEE/ACM International Conference on Automated Software Engineering, ASE 2015; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:118982. [MP16c] Inês Coimbra Morgado and Ana C.R. Paiva. Testing approach for mobile applications through reverse engineering of ui patterns. pages 42-49. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 11; Conference of 30th IEEE/ACM International Conference on Automated Software Engineering Workshops, ASEW 2015; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:119822. [MP18a] Inês Coimbra Morgado and Ana C.R. Paiva. Mobile gui testing. Software Quality Journal, 26(4):1553–1570, 2018. cited By 7. [MP18b] Maxim Mozgovoy and Evgeny Pyshkin. Mobile farm for software testing. pages 31–38. Association for Computing Machinery, Inc, 2018. cited By 1; Conference of 20th International Conference on Human-Computer Interaction with Mobile Devices and Services, MobileHCI 2018; Conference Date: 3 September 2018 Through 6 September 2018; Conference Code:140502. [MP18c] Maxim Mozgovoy and Evgeny Pyshkin. Unity application testing automation with appium and image recognition. 4th International Conference on Tools and Methods of Program Analysis, TMPA 2017, 779:139–150, 2018. cited By 5; Conference of 4th International Conference on Tools and Methods of Program Analysis, TMPA 2017; Conference Date: 3 March 2017 Through 4 March 2017; Conference Code:209349. [MP19] Inês Coimbra Morgado and Ana C.R. Paiva. The impact tool for android testing. Proceedings of the ACM on Human-Computer Interaction, 3(EICS), 2019. cited By 3. [MPFC12] Inês Coimbra Morgado, Ana C.R. Paiva, João Pascoal Faria, and Rui Carlos Camacho. Gui reverse engineering with machine learning. pages 27-31, Zurich, 2012. cited By 8; Conference of 2012 1st International Workshop on Realizing AI Synergies in Software Engineering, RAISE 2012; Conference Date: 5 June 2012 Through 5 June 2012; Conference Code:91309. [MPM13] Rodrigo M.L.M. Moreira, Ana C.R. Paiva, and Atif M. Memon. A pattern-based approach for gui modeling and testing. pages 288-297, Pasadena, CA, 2013. cited By 48; Conference of IEEE International Symposium on Software Reliability Engineering, IS-SRE; Conference Date: 4 November 2013 Through 7 November 2013; Conference Code:102439.

Abel Méndez Porras, Mario Nieto-Hidalgo, Juan Manuel García-Chamizo, Marcelo Jenkins, and Alexandra Martínez Porras. A top-down design approach for an automated testing framework. International Conference on Ubiquitous Computing and Ambient

Intelligence, UCAmI, 9454:37-49, 2015. cited By 2; Conference of 9th International Conference on Ubiquitous Computing and Ambient Intelligence, UCAmI 2015; Conference Date: 1 December 2015 Through 4 December 2015; Conference Code:159259. [MPNM17] Rodrigo M.L.M. Moreira, Ana C.R. Paiva, Miguel Nabuco, and Atif M. Memon. Pattern-based gui testing: Bridging the gap between design and quality assurance. Software Testing Verification and Reliability, 27(3), 2017. cited By 16. [MPRS11] Leonardo Mariani, Mauro Pezzè, Oliviero Riganelli, and Mauro Santoro. Autoblacktest: A tool for automatic black-box testing. pages 1013-1015, Waikiki, Honolulu, HI, 2011. cited By 29; Conference of 33rd International Conference on Software Engineering, ICSE 2011; Conference Date: 21 May 2011 Through 28 May 2011; Conference Code:85380. [MPRS12] Leonardo Mariani, Mauro Pezzè, Oliviero Riganelli, and Mauro Santoro. Autoblacktest: Automatic black-box testing of interactive applications. pages 81–90, Montreal, QC, 2012. cited By 52; Conference of 5th IEEE International Conference on Software Testing, Verification and Validation, ICST 2012; Conference Date: 17 April 2012 Through 21 April 2012; Conference Code:90301. [MPRS14a] Leonardo Mariani, Mauro Pezzè, Oliviero Riganelli, and Mauro Santoro. Automatic testing of gui-based applications. Software Testing Verification and Reliability, 24(5):341–366, 2014. cited By [MPRS14b] Leonardo Mariani, Mauro Pezzè, Oliviero Riganelli, and Mauro Santoro. Link: Exploiting the web of data to generate test inputs. pages 373–384. Association for Computing Machinery, Inc, 2014. cited By 15; Conference of 23rd International Symposium on Software Testing and Analysis, ISSTA 2014; Conference Date: 21 July 2014 Through 25 July 2014; Conference Code:113465. [MPS99] Atif M. Memon, Martha E. Pollack, and Mary Lou Sofia. Using a goal-driven approach to generate test cases for guis. pages 257-266, Los Angeles, CA, USA, 1999. IEEE, Los Alamitos. cited By 64; Conference of Proceedings of the 1999 International Conference on Software Engineering; Conference Date: 16 May 1999 Through 22 May 1999; Conference Code:55237. [MPS00] Atif M. Memon, Martha E. Pollack, and Mary Lou Soffa. Automated test oracles for guis. pages 30-39, San Diego, CA, 2000. Association for Computing Machinery (ACM). cited By 109; Conference of ACM SIGSOFT 8th International Symposium on the Foundations of Software Engineering (FSE-8); Conference Date: 8 November 2000 Through 10 November 2000; Conference [MPS01] Atif M. Memon, Martha E. Pollack, and Mary Lou Soffa. Hierarchical gui test case generation using automated planning. IEEE Transactions on Software Engineering, 27(2):144-155, 2001. cited By 187. [MPZ18] Leonardo Mariani, Mauro Pezzè, and Daniele Zuddas. Augusto: Exploiting popular functionalities for the generation of seman-

tic gui tests with oracles. volume 2018-January, pages 280-290.

IEEE Computer Society, 2018. cited By 14; Conference of 40th International Conference on Software Engineering, ICSE 2018; Conference Date: 27 May 2018 Through 3 June 2018; Conference Code:137142. [MR16] Shakaiba Majeed and Minsoo Ryu. Model-based replay testing for event-driven software. volume 04-08-April-2016, pages 1527-1533. Association for Computing Machinery, 2016. cited By 4; Conference of 31st Annual ACM Symposium on Applied Computing, SAC 2016; Conference Date: 4 April 2016 Through 8 April 2016; Conference Code:121991. [MRK18] Jevgeni Marenkov, Tarmo Robal, and Ahto Kalja. Guideliner a tool to improve web ui development for better usability. Association for Computing Machinery, 2018. cited By 0; Conference of 8th International Conference on Web Intelligence, Mining and Semantics, WIMS 2018; Conference Date: 25 June 2018 Through 27 June 2018; Conference Code:137915. [MS97] Roy A. Maxion and Philip A. Syme. Metristation: A tool for userinterface fault detection. pages 89-98. Institute of Electrical and Electronics Engineers Inc., 1997. cited By 1; Conference of 27th Annual International Symposium on Fault-Tolerant Computing, FTCS 1997; Conference Date: 24 June 1997 Through 27 June 1997; Conference Code:142051. [MS03] Atif M. Memon and Mary Lou Soffa. Regression testing of guis. pages 118–127, Helsinki, 2003. cited By 52; Conference of 9th European Software Engineering Conference Held Jointly with 11th ACM SIGSOFT International Symposium on Foundations of Software Engineering, ESEC/FSE-11; Conference Date: 1 September 2003 Through 5 September 2003; Conference Code:80970. [MS04] Tim S. Miller and Paul A. Strooper. A case study in specification and implementation testing. pages 130–139, Busan, 2004. cited By 1; Conference of Proceedings - 11th Asia-Pacific Software Engineering Conference, APSEC 2004; Conference Date: 30 November 2004 Through 3 December 2004; Conference Code:64781. Reena Mathew and Ryan Spraetz. Test automation on a saas [MS09]platform. pages 317–325, Denver, CO, 2009. cited By 17; Conference of 2nd International Conference on Software Testing, Verification, and Validation, ICST 2009; Conference Date: 1 April 2009 Through 4 April 2009; Conference Code:76415. [MSAD18] M. Meiliana, Irwandhi Septian, Ricky Setiawan Alianto, and Daniel. Comparison analysis of android gui testing frameworks by using an experimental study. volume 135, pages 736–748. Elsevier B.V., 2018. cited By 4; Conference of 3rd International Conference on Computer Science and Computational Intelligence, ICCSCI 2018; Conference Date: 7 September 2018 Through 8 September 2018; Conference Code:138963. [MSP01] Atif M. Memon, Mary Lou Soffa, and Martha E. Pollack. Cover-

age criteria for gui testing. pages 256–267, Vienna, 2001. Association for Computing Machinery (ACM). cited By 166; Conference of 8th Eiropean Engineering Conference (ESEC) and 9th ACM SIGSOFT Symposium on the Foundations of Software Engineer-

ing (FSE-9); Conference Date: 10 September 2001 Through 14 September 2001; Conference Code:60512. [MT11]Alessandro Marchetto and Paolo Tonella. Using search-based algorithms for a jax event sequence generation during testing. Empirical Software Engineering, 16(1):103–140, 2011. cited By 29. [MT16] Jose Lorenzo San Miguel and Shingo Takada. Gui and usage model-based test case generation for android applications with change analysis. pages 43–44. Association for Computing Machinery, Inc, 2016. cited By 5; Conference of 1st International Workshop on Mobile Development, Mobile! 2016; Conference Date: 31 October 2016; Conference Code:124457. [MT17a] Woramet Muangsiri and Shingo Takada. Random gui testing of android application using behavioral model. International Journal of Software Engineering and Knowledge Engineering, 27(9-10):1603–1612, 2017. cited By 1. [MT17b] Woramet Muangsiri and Shingo Takada. Random gui testing of android application using behavioral model. pages 266-271. Knowledge Systems Institute Graduate School, 2017. cited By 2; Conference of 29th International Conference on Software Engineering and Knowledge Engineering, SEKE 2017; Conference Date: 5 July 2017 Through 7 July 2017; Conference Code:130220. [MTK14] Jorge Martinez, Troy Thomas, and Tariq M. King. Echo: A middleware architecture for domain-specific ui test automation. pages 13-15. Association for Computing Machinery, Inc, 2014. cited By 2; Conference of 2nd International Workshop on "Joining AcadeMiA and Industry Contributions to Test Automation and Model-Based Testing"", JAMAICA 2014; Conference Date: 21 July 2014; Conference Code:113415. [MTN13] Aravind MacHiry, Rohan Tahiliani, and Mayur Naik. Dynodroid: An input generation system for android apps. pages 224–234, Saint Petersburg, 2013. cited By 397; Conference of 2013 9th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE 2013; Conference Date: 18 August 2013 Through 26 August 2013; Conference Code:99148. [MTR08] Alessandro Marchetto, Paolo Tonella, and Filippo Ricca. Statebased testing of ajax web applications. pages 121-130, Lillehammer, 2008. cited By 165; Conference of 1st International Conference on Software Testing, Verification and Validation, ICST 2008; Conference Date: 9 April 2008 Through 11 April 2008; Conference Code:73350. [MTV09] Craig Merchant, Manuel Tellez, and Jagannathan Venkatesan. A browser agnostic web application ui test framework: Motivation, architecture, and design. pages 748–751, Las Vegas, NV, 2009. cited By 1; Conference of 6th International Conference on Information Technology: New Generations, ITNG 2009; Conference Date: 27 April 2009 Through 29 April 2009; Conference Code:79848. [MU18] P. V.R. Murthy and Andreas Ulrich. Distributed gui test automation. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 0; Conference of 14th IEEE India Council International

Conference, INDICON 2017; Conference Date: 15 December 2017 Through 17 December 2017; Conference Code:140717. [MVD09] Ali Mesbah and Arie Van Van Deursen. Invariant-based automatic testing of ajax user interfaces. pages 210–220, Vancouver, BC, 2009. cited By 141; Conference of 2009 31st International Conference on Software Engineering, ICSE 2009; Conference Date: 16 May 2009 Through 24 May 2009; Conference Code:79629. [MVDL12] Ali Mesbah, Arie Van Van Deursen, and Stefan Lenselink. Crawling ajax-based web applications through dynamic analysis of user interface state changes. ACM Transactions on the Web, 6(1), 2012. cited By 184. [MVDR12] Ali Mesbah, Arie Van Van Deursen, and Danny Roest. Invariantbased automatic testing of modern web applications. IEEE Transactions on Software Engineering, 38(1):35–53, 2012. cited By 101. [MWSP17] Mathias Menninghaus, Falk Wilke, Jan Philipp Schleutker, and Elke Pulvermüller. Search based gui test generation in java comparing code-based and efg-based optimization goals. pages 179-186. SciTePress, 2017. cited By 0; Conference of 12th International Conference on Evaluation of Novel Approaches to Software Engineering, ENASE 2017; Conference Date: 28 April 2017 Through 29 April 2017; Conference Code:128063.  $[MWX^+16]$ Xin Ma, Ning Wang, Peizhang Xie, Jungui Zhou, Xiaofang Zhang, and Chunrong Fang. An automated testing platform for mobile applications. pages 159-162. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 6; Conference of 2nd IEEE International Conference on Software Quality, Reliability and Security-Companion, QRS-C 2016; Conference Date: 1 August 2016 Through 3 August 2016; Conference Code:123926. [MX04] Atif M. Memon and Qing Xie. Empirical evaluation of the faultdetection effectiveness of smoke regression test cases for gui-based software. pages 8-17, Chicago, IL, 2004. cited By 11; Conference of Proceedings - 20th International Conference on Software Maintenance, ICSM 2004; Conference Date: 11 September 2004 Through 14 September 2004; Conference Code:64662. [MX05] Atif M. Memon and Qing Xie. Studying the fault-detection effectiveness of gui test cases for rapidly evolving software. IEEE Transactions on Software Engineering, 31(10):884–896, 2005. cited By 151. [MY10] Yuan Miao and Xuebing Yang. An fsm based gui test automation model. pages 120-126, Singapore, 2010. cited By 18; Conference of 11th International Conference on Control, Automation, Robotics and Vision, ICARCV 2010; Conference Date: 7 December 2010 Through 10 December 2010; Conference Code:84059. [MZH09] Bin Mu, Mingkui Zhan, and Lanfang Hu. Design and implementation of gui automated testing framework based on xml. volume 4, pages 194-199, Xiamen, 2009. cited By 5; Conference of World Congress on Software Engineering, WCSE; Conference Date: 19 May 2009 Through 21 May 2009; Conference Code:78770. [M13]Josip Maras, Maja Štula, and Jan Carlson. Generating feature usage scenarios in client-side web applications. International Con-

ference on Web Engineering, ICWE, 7977 LNCS:186-200, 2013. cited By 9; Conference of 13th International Conference on Web Engineering, ICWE 2013; Conference Date: 8 July 2013 Through 12 July 2013; Conference Code:98035. [NAF19] Michel Nass, Emil Alégroth, and Robert Feldt. Augmented testing: Industry feedback to shape a new testing technology. pages 176–183. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 1; Conference of 12th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2019; Conference Date: 22 April 2019 Through 27 April 2019; Conference Code:148643. [NAF20] Michel Nass, Emil Alégroth, and Robert Feldt. On the industrial applicability of augmented testing: An empirical study, pages 364-371. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 13th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2020; Conference Date: 23 March 2020 Through 27 March 2020; Conference Code:162282. [NAT15] Yuma Namba, Shun Akimoto, and Tomohiko Takagi. Overview of graphical operational profiles for generating test cases of gui software. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 0; Conference of 16th IEEE/ACIS International Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing, SNPD 2015; Conference Date: 1 June 2015 Through 3 June 2015; Conference Code:115983. [NB13] Stanislava Nedyalkova and Jorge Bernardino. Open source capture and replay tools comparison. pages 117-119, Porto, 2013. cited By 4; Conference of 6th International C\* Conference on Computer Science and Software Engineering, C3S2E 2013; Conference Date: 10 July 2013 Through 12 July 2013; Conference Code:98919. [NB17] Dmitry Nurmuradov and Renee C. Bryce. Caret-hm: Recording and replaying android user sessions with heat map generation using ui state clustering. pages 400–403. Association for Computing Machinery, Inc, 2017. cited By 1; Conference of 26th ACM SIG-SOFT International Symposium on Software Testing and Analysis, ISSTA 2017; Conference Date: 10 July 2017 Through 14 July 2017; Conference Code:128773. [NBN14] Thanuja Janarthana Naidu, Nor Asyikin Basri, and Saravanan Nagenthram. Sahi vs. selenium: A comparative analysis. pages 967-970. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 3; Conference of 2014 International Conference on Contemporary Computing and Informatics, IC3I 2014; Conference Date: 27 November 2014 Through 29 November 2014; Conference Code:110301. [NC19] V. Neethidevan and G. Chandrasekaran. Web automation using selenium web driver python. International Journal of Recent Technology and Engineering, 7(6):845-847, 2019. cited By 0. [ND12] Leckraj Nagowah and Kishan Doorgah. Improving test data management in record and playback testing tools. volume 2, pages

931-937, Kuala Lumpur, 2012. cited By 3; Conference of 2012

[NP14]

International Conference on Computer and Information Science, ICCIS 2012 - A Conference of World Engineering, Science and Technology Congress, ESTCON 2012; Conference Date: 12 June 2012 Through 14 June 2012; Conference Code:93334. [NEB19] Stas Negara, Naeem Esfahani, and Raymond Buse. Practical android test recording with espresso test recorder. pages 193–202. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 3; Conference of 41st IEEE/ACM International Conference on Software Engineering: Software Engineering in Practice, ICSE-SEIP 2019; Conference Date: 25 May 2019 Through 31 May 2019; Conference Code:150945. [NK20] Varun Navak and Daniel Kraus. Session-based recommender systems for action selection in gui test generation. pages 372–375. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 13th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2020; Conference Date: 23 March 2020 Through 27 March 2020; Conference Code:162282. [NKDS15] Ravi Narkhede, Sapana Korde, Avinash Darda, and Saurabh Sharma. An industrial research on gui testing techniques for windows based application using uft. pages 466-471. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 2; Conference of 3rd International Conference on Smart Technologies and Management for Computing, Communication, Controls, Energy and Materials, ICSTM 2015; Conference Date: 6 May 2015 Through 8 May 2015; Conference Code:117174. [NLN19] An Te Nguyen, Bach Le, and Vu Thanh D. Nguyen. Prioritizing automated user interface tests using reinforcement learning, pages 56-65. Association for Computing Machinery, 2019. cited By 2; Conference of 15th International Conference on Predictive Models and Data Analytics in Software Engineering, PROMISE 2019, co-located with the 13th International Symposium on Empirical Software Engineering and Measurement, ESEM 2019; Conference Date: 18 September 2019; Conference Code:154743. [NLT19] Hanh Phuc Nguyen, Hong Anh Le, and Ninh Thuan Truong. jfat: An automation framework for web application testing. 7th EAI International Conference on Context-Aware Systems and Applications, ICCASA 2018 and 4th EAI International Conference on Nature of Computation and Communication, ICTCC 2018, 266:48-57, 2019. cited By 0; Conference of 7th EAI International Conference on Context-Aware Systems and Applications, ICCASA 2018 and 4th EAI International Conference on Nature of Computation and Communication, ICTCC 2018; Conference Date: 22 November 2018 Through 23 November 2018; Conference Code:222519. [NM14] Bao N. Nguyen and Atif M. Memon. An observe-model-exercise\* paradigm to test event-driven systems with undetermined input spaces. IEEE Transactions on Software Engineering, 40(3):216-234, 2014. cited By 25.

> Miguel Nabuco and Ana C.R. Paiva. Model-based test case generation for web applications. *International Conference on Formal En-*

gineering Methods, ICFEM, 8584 LNCS(PART 6):248-262, 2014. cited By 8; Conference of 14th International Conference on Computational Science and Its Applications, ICCSA 2014; Conference Date: 30 June 2014 Through 3 July 2014; Conference Code: 106576. [NPR11] Pedro Luis Mateo Navarro, Gregorio Martínez Pérez, and Diego Sevilla Ruíz. Towards software quality and user satisfaction through user interfaces. pages 415-418, Berlin, 2011. cited By 1; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation, ICST 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code: 85144.[NR12] Hajra Naseer and Abdul Rauf. Validation of ontology based test case generation for graphical user interface. pages 465-469, Islamabad, 2012. cited By 4; Conference of 15th IEEE International Multitopic Conference, INMIC 2012; Conference Date: 13 December 2012 Through 15 December 2012; Conference Code:97004. [NRBM14] Bao N. Nguyen, Bryan Robbins, Ishan Banerjee, and Atif M. Memon. Guitar: An innovative tool for automated testing of guidriven software. Automated Software Engineering, 21(1):65–105, 2014. cited By 126. [NRP05] Pedro Santos Neto, Rodolfo Ferreira Resende, and Clarindo Pádua. A method for information systems testing automation. volume 3520, pages 504-518, Porto, 2005. Springer Verlag. cited By 5; Conference of 17th International Conference on Advanced Information Systems Engineering, CAiSE 2005; Conference Date: 13 June 2005 Through 17 June 2005; Conference Code:65647. [NRP09] Pedro Luis Mateo Navarro, Diego Sevilla Ruíz, and Gregorio Martínez Pérez. Automated gui testing validation guided by annotated use cases. pages 2796–2804, Lubeck, 2009. cited By 1; Conference of 39th Jahrestagung der Gesellschaft für Informatik e.V. (GI): Im Focus das Leben, INFORMATIK 2009 39th Annual Meeting of the German Informatics Society (GI): Focus on Life, INFORMATIK 2009; Conference Date: 28 September 2009 Through 2 October 2009; Conference Code:95691. [NRP17] Pedro Luis Mateo Navarro, Diego Sevilla Ruíz, and Gregorio Martínez Pérez. Oht: Open and cross-platform gui testing. Journal of Intelligent and Fuzzy Systems, 32(5):3231–3243, 2017. cited By 0. [NRRRHR19] M. Narayana, N. Raghu Ram Reddy, and N. Hyndavi Reddy. High speed script execution for gui automation using computer vision. International Journal of Electrical and Computer Engineering, 9(1):231-236, 2019. cited By 0. [NSS10a] Duc Hoai Nguyen, Paul A. Strooper, and Jorn Guy Suess. Modelbased testing of multiple gui variants using the gui test generator. pages 24-30, Cape Town, 2010. cited By 7; Conference of 5th

Workshop on Automation of Software Test, AST 2010, in Conjunction with the 32nd ACM/IEEE International Conference on Software Engineering, ICSE 2010; Conference Date: 2 May 2010

Through 8 May 2010; Conference Code:81178.

[NSS10b]

Duc Hoai Nguyen, Paul A. Strooper, and Jörn Guy Süß. Automated functionality testing through guis. volume 102, pages 153–162, Brisbane, QLD, 2010. cited By 5; Conference of 33rd Australasian Computer Science Conference, ACSC 2010; Conference Date: 18 January 2010 Through 22 January 2010; Conference Code:93744.

[NTF18]

Luigi Novella, Manuela Tufo, and Giovanni Fiengo. Improving test suites via a novel testing with model learning approach. pages 235–240. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 27th IEEE International Conference on Enabling Technologies: Infrastructure for Collaborative Enterprises, WETICE 2018; Conference Date: 27 June 2018 Through 29 June 2018; Conference Code:141261.

[NTF19]

Luigi Novella, Manuela Tufo, and Giovanni Fiengo. Automatic test set generation for event-driven systems in the absence of specifications combining testing with model inference. *Information Technology and Control*, 48(2):316–334, 2019. cited By 0.

[NV12]

P. Nagarani and R. Venkataramanachary. A tool based approach for automation of gui applications. Coimbatore, Tamilnadu, 2012. cited By 2; Conference of 2012 3rd International Conference on Computing, Communication and Networking Technologies, ICC-CNT 2012; Conference Date: 26 July 2012 Through 28 July 2012; Conference Code:95198.

[NVDSM16]

Nelson Mariano Leite Neto, Patrícia Vilain, and Ronaldo Dos Santos Mello. Segen: Generation of test cases for selenium and selendroid. pages 433–442. Association for Computing Machinery, 2016. cited By 2; Conference of 18th International Conference on Information Integration and Web-Based Applications and Services, iiWAS 2016; Conference Date: 28 November 2016 Through 30 November 2016; Conference Code:126325.

[NWW10]

Jin Ni, Mingming Wang, and Jiangqing Wang. Realization on intelligent gui automation testing based-on .net. volume 1, pages 14–17, Chengdu, 2010. cited By 2; Conference of 2010 3rd IEEE International Conference on Computer Science and Information Technology, ICCSIT 2010; Conference Date: 9 July 2010 Through 11 July 2010; Conference Code:81988.

[NZPK14]

Razieh Nokhbeh Zaeem, Mukul R. Prasad, and Sarfraz Khurshid. Automated generation of oracles for testing user-interaction features of mobile apps. pages 183–192, Cleveland, OH, 2014. IEEE Computer Society. cited By 53; Conference of 7th IEEE International Conference on Software Testing, Verification and Validation, ICST 2014; Conference Date: 31 March 2014 Through 4 April 2014; Conference Code:105852.

[OAFG98]

Thomas J. Ostrand, Aaron Anodide, Herbert Foster, and Tarak Goradia. A visual test development environment for gui systems. pages 82–92. Association for Computing Machinery, Inc, 1998. cited By 38; Conference of 1998 ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 1998; Conference Date: 2 March 1998 Through 4 March 1998; Conference Code:129251.

[OAGM15] Rafael Alves Paes De Oliveira, Emil Alégroth, Zebao Gao, and Atif M. Memon. Definition and evaluation of mutation operators for gui-level mutation analysis. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 12; Conference of 2015 8th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2015; Conference Date: 13 April 2015 Through 17 April 2015; Conference Code:112292.

Alberto Oliveira, Ricardo Freitas, Alípio M. Jorge, Vítor Amorim, Nuno Moniz, Ana C.R. Paiva, and Paulo Jorge Azevedo. Sequence mining for automatic generation of software tests from gui event traces. 21th International Conference on Intelligent Data Engineering and Automated Learning, IDEAL 2020, 12490 LNCS:516–523, 2020. cited By 0; Conference of 21th International Conference on Intelligent Data Engineering and Automated Learning, IDEAL 2020; Conference Date: 4 November 2020 Through 6 November 2020; Conference Code:251049.

Rafael Alves Paes De Oliveira, Atif M. Memon, Victor N. Gil, F. L.S. Nunes, and Márcio Eduardo Delamaro. An extensible framework to implement test oracles for non-testable programs. volume 2014-January, pages 199–204. Knowledge Systems Institute Graduate School, 2014. cited By 6; Conference of 26th International Conference on Software Engineering and Knowledge Engineering, SEKE 2014; Conference Date: 1 July 2014 Through 3 July 2014; Conference Code:112837.

Jeff Offutt, Ye Wu, Xiaochen Du, and Hong Huang. Bypass testing of web applications. pages 187–197, Saint-Malo, 2004. cited By 69; Conference of ISSRE 2004 Proceedings; 15th International Symposium on Software Reliability Engineering; Conference Date: 2 November 2004 Through 5 November 2004; Conference Code:64522.

Tarik Ozkul. Automatic measurement of user interface quality. volume 2018-January, pages 71–77. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 0; Conference of 2017 International Conference on Infocom Technologies and Unmanned Systems, ICTUS 2017; Conference Date: 18 December 2017 Through 20 December 2017; Conference Code:134574.

Samad Paydar. Automated gui layout refactoring to improve monkey testing of android applications. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 3rd CSI/CPSSI International Symposium on Real-Time and Embedded Systems and Technologies, RTEST 2020; Conference Date: 10 June 2020 Through 11 June 2020; Conference Code:161862.

Samad Paydar. Making android apps monkey-friendly. pages 16–20. Association for Computing Machinery, Inc, 2020. cited By 0; Conference of 7th IEEE/ACM International Conference on Mobile Software Engineering and Systems, MOBILESoft 2020; Conference Date: 13 July 2020; Conference Code:163744.

Neha Patil, Dhananjay K. Bhole, and Prasanna J. Shete. Enhanced ui automator viewer with improved android accessibility evaluation features. pages 977–983. Institute of Electrical

 $[OFJ^{+}20]$ 

 $[OMG^+14]$ 

[OWDH04]

[Ozk18]

[Pay20a]

[Pay20b]

[PBS17]

and Electronics Engineers Inc., 2017. cited By 8; Conference of 1st 1st International Conference on Automatic Control and Dynamic Optimization Techniques, ICACDOT 2016; Conference Date: 9 September 2016 Through 10 September 2016; Conference Code:126850.

[PCR14]

Macario Polo, Danilo Caivano, and Pedro Reales. Extending the bacterio tool for web application mutation testing. pages 151–164, Pucon, 2014. Universidad de la Frontera. cited By 0; Conference of 17th Ibero-American Conference on Software Engineering, CIBSE 2014; Conference Date: 23 April 2014 Through 25 April 2014; Conference Code:106930.

[PFM08]

Ana C.R. Paiva, João Pascoal Faria, and Pedro M.C. Mendes. Reverse engineered formal models for gui testing. 12th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2007, 4916 LNCS:218–233, 2008. cited By 17; Conference of 12th International Workshop on Formal Methods for Industrial Critical Systems, FMICS 2007; Conference Date: 1 July 2007 Through 2 July 2007; Conference Code:72136.

[PFTV05]

Ana C.R. Paiva, João Pascoal Faria, Nikolai Tillmann, and Raul Moreira Vidal. A model-to-implementation mapping tool for automated model-based gui testing. *International Conference on Formal Engineering Methods, ICFEM*, 3785 LNCS:450–464, 2005. cited By 45; Conference of 7th International Conference on Formal Engineering Methods, ICFEM 2005; Conference Date: 1 November 2005 Through 4 November 2005; Conference Code:67365.

[PFV07]

Ana C.R. Paiva, João Pascoal Faria, and Raul Moreira Vidal. Towards the integration of visual and formal models for gui testing. *Electronic Notes in Theoretical Computer Science*, 190(2 SPEC. ISS.):99–111, 2007. cited By 17.

[PGB19]

Ana C.R. Paiva, Marco A. Gonçalves, and Andre R. Barros. Testing android incoming calls. pages 441–448. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 1; Conference of 12th IEEE International Conference on Software Testing, Verification and Validation, ICST 2019; Conference Date: 22 April 2019 Through 27 April 2019; Conference Code:148641.

[PGED19]

Ana C.R. Paiva, Joao M.E.P. Gouveia, Jean David Elizabeth, and Márcio Eduardo Delamaro. Testing when mobile apps go to background and come back to foreground. pages 102–111. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 3; Conference of 12th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2019; Conference Date: 22 April 2019 Through 27 April 2019; Conference Code:148643.

[PGMC17]

Miguel Pinto, Marcelo Gonçalves, Paolo Masci, and José Creisssac Campos. Tom: A model-based gui testing framework. 14th International Conference on Formal Aspects of Component Software, FACS 2017, 10487 LNCS:155–161, 2017. cited By 0; Conference of 14th International Conference on Formal Aspects of Component Software, FACS 2017; Conference Date: 10 October 2017 Through 13 October 2017; Conference Code:199339.

[PHSB12]

Raphael Pham, Helge Holzmann, Kurt Schneider, and Christian Brüggemann. Beyond plain video recording of gui tests: Linking test case instructions with visual response documentation. pages 103–109, Zurich, 2012. cited By 2; Conference of 2012 7th International Workshop on Automation of Software Test, AST 2012; Conference Date: 2 June 2012 Through 3 June 2012; Conference Code:91305.

[PHSB14]

Raphael Pham, Helge Holzmann, Kurt Schneider, and Christian Brüggemann. Tailoring video recording to support efficient gui testing and debugging. *Software Quality Journal*, 22(2):273–292, 2014. cited By 1.

 $[PHW^{+}20]$ 

Minxue Pan, An Huang, Guoxin Wang, Tian Zhang, and Xuandong Li. Reinforcement learning based curiosity-driven testing of android applications. pages 153–164. Association for Computing Machinery, Inc, 2020. cited By 1; Conference of 29th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2020; Conference Date: 18 July 2020 Through 22 July 2020; Conference Code:161847.

[PL11]

Xuan Peng and Lu Lu. A new approach for session-based test case generation by ga. pages 91–96, Xi'an, 2011. cited By 4; Conference of 2011 IEEE 3rd International Conference on Communication Software and Networks, ICCSN 2011; Conference Date: 27 May 2011 Through 29 May 2011; Conference Code:86671.

[PM11]

J. Prabhu and Nagarajan Malmurugan. A survey on automated gui testing procedures. European Journal of Scientific Research, 64(3):456–462, 2011. cited By 5.

[PM14]

Madhumita Panda and Durga Prasad Mohapatra. Automated graphical user interface regression testing. 1st International Conference on Internet Computing and Information Communications, ICICIC Global 2012, 216:325–341, 2014. cited By 0; Conference of 1st International Conference on Internet Computing and Information Communications, ICICIC Global 2012; Conference Date: 12 February 2012 Through 14 February 2012; Conference Code:116539.

[PPG17]

Fernando Paulovsky, Esteban Pavese, and Diego Garbervetsky. High-coverage testing of navigation models in android applications. pages 52–58. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 3; Conference of 12th IEEE/ACM International Workshop on Automation of Software Testing, AST 2017; Conference Date: 20 May 2017 Through 21 May 2017; Conference Code:128907.

[PPK16]

Sushant Patil, Urvil Parmar, and Rohit Karegaonkar. Automated software testing for high-end touch screen automotive displays. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 1; Conference of IEEE International Transportation Electrification Conference, ITEC-India 2015; Conference Date: 27 August 2015 Through 29 August 2015; Conference Code:119112.

[PPVG18]

Matija Pul, Vukota Pekoviç, Mario Vranješ, and Ratko Grbíc. Automatic functionality verification of hybrid set-top boxes with dy-

namic user interface. *IEEE Transactions on Consumer Electronics*, 64(4):409–417, 2018. cited By 0.

Josef Pichler and Rudolf Ramler. How to test the intangible properties of graphical user interfaces? pages 494–497, Lillehammer, 2008. cited By 10; Conference of 1st International Conference on Software Testing, Verification and Validation, ICST 2008; Conference Date: 9 April 2008 Through 11 April 2008; Conference Code:73350.

Mauro Pezzè, Paolo Rondena, and Daniele Zuddas. Automatic gui testing of desktop applications: An empirical assessment of the state of the art. pages 54–62. Association for Computing Machinery, Inc, 2018. cited By 3; Conference of 2018 International Symposium on Software Testing and Analysis, ISSTA 2018; Conference Date: 16 July 2018 Through 21 July 2018; Conference Code:143972.

Heidar Pirzadeh and Sara Shanian. Resilient user interface level tests. pages 683–688. Association for Computing Machinery, Inc, 2014. cited By 1; Conference of 29th ACM/IEEE International Conference on Automated Software Engineering, ASE 2014; Conference Date: 15 September 2014 Through 19 September 2014; Conference Code:114557.

Chatchawan Prongsang and Taratip Suwannasart. A tool for test case impact analysis from user interface changes in android mobile application. volume 1, pages 483–486. Newswood Limited, 2016. cited By 1; Conference of International Multiconference of Engineers and Computer Scientists 2016, IMECS 2016; Conference Date: 16 March 2016 Through 18 March 2016; Conference Code:122273.

Heidar Pirzadeh, Sara Shanian, and Farzin Davari. A novel framework for creating user interface level tests resistant to refactoring of web applications. pages 268–273. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 1; Conference of 9th International Conference on the Quality of Information and Communications Technology, QUATIC 2014; Conference Date: 23 September 2014 Through 26 September 2014; Conference Code:109826.

Michael Pradel, Parker Schuh, George C. Necula, and Koushik Sen. Eventbreak: Analyzing the responsiveness of user interfaces through performance-guided test generation. *ACM SIGPLAN Notices*, 49(10):33–47, 2014. cited By 11.

Amit M. Paradkar, Avik Sinha, Clay E. Williams, Robert D. Johnson, Susan Outterson, Charles Shriver, and Carol Liang. Automated functional conformance test generation for semantic web services. pages 110–117, Salt Lake City, UT, 2007. cited By 28; Conference of 2007 IEEE International Conference on Web Services, ICWS 2007; Conference Date: 9 July 2007 Through 13 July 2007; Conference Code:72551.

Tuomas Pajunen, Tommi Takala, and Mika Katara. Model-based testing with a general purpose keyword-driven test automation framework. pages 242–251, Berlin, 2011. cited By 25; Confer-

[PRZ18]

[PR08]

[PS14]

[PS16]

[PSD14]

[PSNS14]

[PSW<sup>+</sup>07]

[PTK11]

ence of 4th IEEE International Conference on Software Testing, Verification, and Validation Workshops, ICSTW 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:86023.

[PUSB15]

Šarūnas Packevičius, Andrej Ušaniov, Šarūnas Stanskis, and Eduardas Bareiŝa. The testing method based on image analysis for automated detection of ui defects intended for mobile applications. 21st International Conference on Information and Software Technologies, ICIST 2015, 538:560–576, 2015. cited By 3; Conference of 21st International Conference on Information and Software Technologies, ICIST 2015; Conference Date: 15 October 2015 Through 16 October 2015; Conference Code:153159.

[PV17]

Ana C.R. Paiva and Liliana Vilela. Multidimensional test coverage analysis: Paradigm-cov tool. *Cluster Computing*, 20(1):633–649, 2017. cited By 4.

 $[PVT^+20]$ 

I. S.Wishnu B. Prasetya, Maurin Voshol, Tom Tanis, Adam Smits, Bram Smit, Jacco Van Mourik, Menno Klunder, Frank Hoogmoed, Stijn Hinlopen, August Van Casteren, Jesse Van De Berg, Naraenda G.W.Y. Prasetya, Samira Shirzadehhajimahmood, and Saba Gholizadeh Ansari. Navigation and exploration in 3d-game automated play testing. pages 3–9. Association for Computing Machinery, Inc, 2020. cited By 0; Conference of 11th ACM SIGSOFT International Workshop on Automating TEST Case Design, Selection, and Evaluation, Co-located with the ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2020; Conference Date: 8 November 2020 Through 9 November 2020; Conference Code:164837.

[PWDW09]

Songwen Pei, Chunxue Wu, Yuewei Ding, and Baifeng Wu. Effective gui-oriented automated testing platform for pervasive computing software environment. pages 557–560, Tamsui, Taipei, 2009. cited By 0; Conference of 2009 Joint Conferences on Pervasive Computing, JCPC 2009; Conference Date: 3 December 2009 Through 5 December 2009; Conference Code: 79948.

[PXP<sup>+</sup>19]

Minxue Pan, Tongtong Xu, Yu Pei, Zhong Li, Tian Zhang, and Xuandong Li. Gui-guided repair of mobile test scripts. pages 326–327. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 2; Conference of 41st IEEE/ACM International Conference on Software Engineering: Companion, ICSE-Companion 2019; Conference Date: 25 May 2019 Through 31 May 2019; Conference Code:150943.

 $[QdASQ^+19]$ 

N. C. Quental, Clauirton de Albuquerque Siebra, Jonysberg Peixoto Quintino, Fabiana Florentin, Fabio Q.B. Silva, and André Luís de Medeiros Santos. Automating gui response time measurements in mobile and web applications. pages 35–41. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 2; Conference of 14th IEEE/ACM International Workshop on Automation of Software Test, AST 2019; Conference Date: 27 May 2019; Conference Code:151737.

[QHWW19] Xiaofang Qi, Yunlong Hua, Peng Wang, and Ziyuan Wang. Lever-

aging keyword-guided exploration to build test models for web applications. Information and Software Technology, 111:110-119,

2019. cited By 0.

[QJ09] Siyou Qian and Fan Jiang. An event interaction structure for gui test case generation. pages 619–622, Beijing, 2009. cited By 6; Conference of 2009 2nd IEEE International Conference on Com-

Conference of 2009 2nd IEEE International Conference on Computer Science and Information Technology, ICCSIT 2009; Conference Date: 8 August 2009 Through 11 August 2009; Conference

Code:78148.

[QSF09] Kai Qian, Mate Sztipanovits, and Xiang Fu. Automated testing and smart tutoring system for web application. volume 2, pages 582–585, Shanghai, 2009. cited By 0; Conference of 2008 Interna-

tional Workshop on Education Technology and Training and 2008 International Workshop on Geoscience and Remote Sensing, ETT and GRS 2008; Conference Date: 21 December 2008 Through 22

December 2008; Conference Code:78327.

[QTNL16] Zhengrui Qin, Yutao Tang, Ed Novak, and Qun Li. Mobiplay: A

remote execution based record-and-replay tool for mobile applications. volume 14-22-May-2016, pages 571–582. IEEE Computer Society, 2016. cited By 39; Conference of 2016 IEEE/ACM 38th IEEE International Conference on Software Engineering, ICSE 2016; Conference Date: 14 May 2016 Through 22 May 2016; Con-

ference Code:121623.

[QWMW17] Xiaofang Qi, Ziyuan Wang, Junqiang Mao, and Peng Wang. Automated testing of web applications using combinatorial strate-

gies. Journal of Computer Science and Technology, 32(1):199–210,

2017. cited By 5.

[QZW19] Xue Qin, Hao Zhong, and Xiaoyin Wang. Testmig: Migrating

gui test cases from ios to android. pages 329–340. Association for Computing Machinery, Inc, 2019. cited By 6; Conference of 28th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2019; Conference Date: 15 July 2019

Through 19 July 2019; Conference Code:149531.

[RA14] Abdul Rauf and Mohammad N. Alanazi. Using artificial intelli-

gence to automatically test gui. pages 3–5. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 5; Conference of 9th International Conference on Computer Science and Education, ICCCSE 2014; Conference Date: 22 August 2014 Through

24 August 2014; Conference Code:108664.

[RAA15] Abdul Rauf and Eisa A Aleisa. Pso based automated test coverage analysis of event driven systems. *Intelligent Automation and Soft* 

Computing, 21(4):491–502, 2015. cited By 7.

[RAF18] Vincenzo Riccio, Domenico Amalfitano, and Anna Rita Fasolino.

Is this the lifecycle we really want?: An automated black-box testing approach for android activities. pages 68–77. Association for Computing Machinery, Inc, 2018. cited By 4; Conference of 2018 International Symposium on Software Testing and Analysis, IS-STA 2018; Conference Date: 16 July 2018 Through 21 July 2018;

Conference Code:143972.

[RAJS10]

Abdul Rauf, Sajid Anwar, Mohamed Arfan Jaffer, and Arshad Ali Shahid. Automated gui test coverage analysis using ga. pages 1057–1062, Las Vegas, NV, 2010. cited By 21; Conference of 7th International Conference on Information Technology - New Generations, ITNG 2010; Conference Date: 12 April 2010 Through 14 April 2010; Conference Code:81329.

[RAKS10]

Abdul Rauf, Sajid Anwar, Naveed Kazim, and Arshad Ali Shahid. Evolutionary based automated coverage analysis for gui testing. *International Conference on Contemporary Computing, IC3*, 94 CCIS(PART 1):456–466, 2010. cited By 2; Conference of 3rd International Conference on Contemporary Computing, IC3 2010; Conference Date: 9 August 2010 Through 11 August 2010; Conference Code:81747.

 $[RAR^{+}10]$ 

Abdul Rauf, Sajid Anwar, Muhammad Babar Ramzan, Shafiq Ur Réhman, and Arshad Ali Shahid. Ontology driven semantic annotation based gui testing. pages 261–264, Islamabad, 2010. cited By 4; Conference of 6th International Conference on Emerging Technologies, ICET 2010; Conference Date: 18 October 2010 Through 19 October 2010; Conference Code:82993.

 $[RAV^{+}20]$ 

Fernando Pastor Ricós, Pekka Aho, Tanja E.J. Vos, Ismael Torres Boigues, Ernesto Calás Blasco, and Héctor Martínez. Deploying testar to enable remote testing in an industrial ci pipeline: A casebased evaluation. *International Symposium on Leveraging Applications of Formal Methods, Verification and Validation, ISoLA*, 12476 LNCS:543–557, 2020. cited By 1; Conference of 9th International Symposium on Leveraging Applications of Formal Methods, Verification and Validation, ISoLA 2020; Conference Date: 20 October 2020 Through 30 October 2020; Conference Code:250909. Rudolf Ramler, Georg Buchgeher, and Claus Klammer. Adapting automated test generation to gui testing of industry applications. *Information and Software Technology*, 93:248–263, 2018. cited By

[RBK18]

[REAV16]

10.

Urko Rueda, Anna I. Esparcia-Alcazar, and Tanja E.J. Vos. Visualization of automated test results obtained by the testar tool. pages 53–66. Universidad de las Fuerzas Armadas ESPE, 2016. cited By 1; Conference of 19th Ibero-American Conference on Software Engineering, CIBSE 2016; Conference Date: 27 April 2016 Through 29 April 2016; Conference Code:123413.

[RH17a]

Rudolf Ramler and Robert Hoschek. How to test in sixteen languages? automation support for localization testing. pages 542–543. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 3; Conference of 10th IEEE International Conference on Software Testing, Verification and Validation, ICST 2017; Conference Date: 13 March 2017 Through 17 March 2017; Conference Code: 127845.

[RH17b]

Rudolf Ramler and Robert Hoschek. Process and tool support for internationalization and localization testing in software product development. *International Conference on Product-Focused Software Process Improvement, PROFES,* 10611 LNCS:385–393, 2017. cited By 1; Conference of 18th International Conference on Product-Focused Software Process Improvement, PROFES 2017; Conference Date: 29 November 2017 Through 1 December 2017; Conference Code:204559.

[RHZ18a]

Andreas Rau, Jenny Hotzkow, and Andreas Zeller. Efficient gui test generation by learning from tests of other apps. pages 370–371. IEEE Computer Society, 2018. cited By 7; Conference of 40th ACM/IEEE International Conference on Software Engineering, ICSE 2018; Conference Date: 27 May 2018 Through 3 June 2018; Conference Code:137351.

[RHZ18b]

Andreas Rau, Jenny Hotzkow, and Andreas Zeller. Transferring tests across web applications. *International Conference on Web Engineering, ICWE*, 10845 LNCS:50–64, 2018. cited By 4; Conference of 18th International Conference on Web Engineering, ICWE 2018; Conference Date: 5 June 2018 Through 8 June 2018; Conference Code:213769.

[RJS11]

Abdul Rauf, Arfan Jaffar, and Arshad Ali Shahid. Fully automated gui testing and coverage analysis using genetic algorithms. *International Journal of Innovative Computing, Information and Control*, 7(6):3281–3294, 2011. cited By 7.

[RK19]

Rudolf Ramler and Claus Klammer. Enhancing acceptance test-driven development with model-based test generation. pages 503–504. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 2; Conference of 19th IEEE International Conference on Software Quality, Reliability and Security Companion, QRS-C 2019; Conference Date: 22 July 2019 Through 26 July 2019; Conference Code:152544.

[RKK<sup>+</sup>10]

Abdul Rauf, Naveed Kazim Khan, Sajid Anwar Khan, Shafiq Ur Rehman, and Arshad Ali Shahid. Maximizing gui test coverage through particle swarm optimization. pages 51–56, San Francisco, CA, 2010. cited By 0; Conference of 19th International Conference on Software Engineering and Data Engineering 2010, SEDE 2010; Conference Date: 16 June 2010 Through 18 June 2010; Conference Code:99068.

[RKW19]

Rudolf Ramler, Claus Klammer, and Thomas Wetzlmaier. Lessons learned from making the transition to model-based gui testing. pages 22–27. Association for Computing Machinery, Inc, 2019. cited By 0; Conference of 10th ACM SIGSOFT International Workshop on Automating TEST Case Design, Selection, and Evaluation, A-TEST 2019, co-located with the 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2019; Conference Date: 26 August 2019 Through 27 August 2019; Conference Code:154996.

[RMVD10]

Danny Roest, Ali Mesbah, and Arie Van Van Deursen. Regression testing ajax applications: Coping with dynamism. pages 127–136, Paris, 2010. cited By 44; Conference of 3rd International Conference on Software Testing, Verification and Validation, ICST 2010; Conference Date: 7 April 2010 Through 9 April 2010; Conference Code:81067.

[Rob17]

Bryan Robbins. Characterizing software test case behavior with regression models. Advances in Computers, 105:115-176, 2017. cited By 0.

[RR15]

Jose Rodriguez and Glen D. Rodriguez. Automatic generation of gui test cases using ant colony optimization and greedy algorithm. pages 209–221. Ibero-American Conference on Software Engineering, 2015. cited By 1; Conference of 18th Ibero-American Conference on Software Engineering, CIBSE 2015; Conference Date: 22 April 2015 Through 24 April 2015; Conference Code:112515.

[RR17]

Abdul Rauf and Muhammad Babar Ramzan. Parallel testing and coverage analysis for context-free applications. *Cluster Computing*, 21(1):729–739, 2017. cited By 2.

[RVA+15]

Urko Rueda, Tanja E.J. Vos, Francisco Almenar, Mirella Oreto, and Anna I. Esparcia-Alcazar. Testar - from academic protoype towards an industry-ready tool for automated testing at the user interface level. Sistedes, 2015. cited By 6; Conference of 20th Jornadas de Ingeniera del Software y Bases de Datos, JISBD 2015 - 20th Conference on Software Engineering and Databases, JISBD 2015; Conference Date: 15 September 2015 Through 17 September 2015; Conference Code:149665.

[RWH18]

Rudolf Ramler, Thomas Wetzlmaier, and Robert Hoschek. Gui scalability issues of windows desktop applications and how to find them. pages 63–67. Association for Computing Machinery, Inc, 2018. cited By 1; Conference of 2018 International Symposium on Software Testing and Analysis, ISSTA 2018; Conference Date: 16 July 2018 Through 21 July 2018; Conference Code:143972.

[SASS16]

Eman M. Saleh and Omar Al Sheik Salem. A model-driven engineering transition-based gui testing technique. pages 108–113. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 2; Conference of International Conference on Computational Science and Computational Intelligence, CSCI 2015; Conference Date: 7 December 2015 Through 9 December 2015; Conference Code:119673.

[SAWSY18]

Arnaldo Marulitua Sinaga, P. Adi Wibowo, Ariestoni Silalahi, and Nita Yolanda. Performance of automation testing tools for android applications. pages 534–539. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 10th International Conference on Information Technology and Electrical Engineering, ICITEE 2018; Conference Date: 24 July 2018 Through 26 July 2018; Conference Code:142492.

 $[SBR^+20]$ 

Diego F. Souza, Arthur F. Batista, Thiago M. Rocha, Cícero Augusto L. Pahins, Larissa M. Almeida, Fabrício D'Morison, and Jung-yoon Cha. Wizard: An intelligent approach to prepare android devices for reproducible tests. Association for Computing Machinery, 2020. cited By 0; Conference of 3rd International Conference on Applications of Intelligent Systems, APPIS 2020; Conference Date: 7 January 2020 Through 9 January 2020; Conference Code:157657.

[SEDE18]

[SC11] Bo Song and Shengbo Chen. Testing web applications with web frameset and browser interactions. Information Technology Journal, 10(7):1305–1314, 2011. cited By 0. Jonathan A. Saddler and Myra B. Cohen. Eventflowslicer: Goal [SC16] based test generation for graphical user interfaces. pages 8–15. Association for Computing Machinery, Inc, 2016. cited By 1; Conference of 7th International Workshop on Automating Test Case Design, Selection, and Evaluation, A-TEST 2016; Conference Date: 18 November 2016; Conference Code:124940. [SC17] Jonathan A. Saddler and Myra B. Cohen. Eventflowslicer: A tool for generating realistic goal-driven gui tests. pages 955-960. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 2; Conference of 32nd IEEE/ACM International Conference on Automated Software Engineering, ASE 2017; Conference Date: 30 October 2017 Through 3 November 2017; Conference Code:132671. [SCJB12] Amanda Swearngin, Myra B. Cohen, Bonnie E. John, and Rachel K.E. Bellamy. Easing the generation of predictive human performance models from legacy systems. pages 2489–2498, Austin, TX, 2012. cited By 6; Conference of 30th ACM Conference on Human Factors in Computing Systems, CHI 2012; Conference Date: 5 May 2012 Through 10 May 2012; Conference Code:89842. [SCJB13] Amanda Swearngin, Myra B. Cohen, Bonnie E. John, and Rachel K.E. Bellamy. Human performance regression testing. pages 152-161, San Francisco, CA, 2013. cited By 11; Conference of 2013 35th International Conference on Software Engineering, ICSE 2013; Conference Date: 18 May 2013 Through 26 May 2013; Conference Code:100317.  $[SCL^+20]$ Ronnie E.S. Santos, J. Rafael Cordeiro, Yvan Labiche, Cleyton Vanut Cordeiro De Magalhães, and Fabio Q.B. Silva. Bug! falha! bachi! fallo! défaut!! what about internationalization testing in the software industry? IEEE Computer Society, 2020. cited By 0; Conference of 14th ACM/IEEE International Symposium on Empirical Software Engineering and Measurement, ESEM, ESEM 2020; Conference Date: 5 October 2020 Through 7 October 2020; Conference Code:164322. [SCP08] José Luís Silva, José Creisssac Campos, and Ana C.R. Paiva. Model-based user interface testing with spec explorer and concurtasktrees. Electronic Notes in Theoretical Computer Science, 208(C):77–93, 2008. cited By 25. [SCY17] Yenan Shih, Yiping Chang, and Chengzen Yang. An automated detection framework for testing visual gui layouts of android applications. pages 544-548. International Workshop on Computer Science and Engineering (WCSE), 2017. cited By 2; Conference of International Workshop on Computer Science and Engineering, WCSE; Conference Date: 25 June 2017 Through 27 June 2017; Conference Code:129214.

Davi Bernardo Silva, Marcelo Medeiros Eler, Vinícius Humberto Serapilha Durelli, and Andre Takeshi Endo. Characterizing

mobile apps from a source and test code viewpoint. *Information and Software Technology*, 101:32–50, 2018. cited By 10.

[SEK15]

Kapil Singi, Dipin Era, and Vikrant S. Kaulgud. Model-based approach for automated test case generation from visual requirement specifications. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 1; Conference of 2015 8th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2015; Conference Date: 13 April 2015 Through 17 April 2015; Conference Code:112292.

[Sen10]

Gagandeep Jyotsna Sengupta. Regression testing method based on xml schema for gui components. *Journal of Software Engineering*, 4(2):137–146, 2010. cited By 5.

[SGG<sup>+</sup>15]

Kevin Salvesen, Juan Pablo Galeotti, Florian Groß, Gordon Fraser, and Andreas Zeller. Using dynamic symbolic execution to generate inputs in search-based gui testing. pages 32–35. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 7; Conference of 8th International Workshop on Search-Based Software Testing, SBST 2015; Conference Date: 18 May 2015 Through 19 May 2015; Conference Code:115833.

[SGSP06]

Sara E. Sprenkle, Emily Gibson, Sreedevi Sampath, and Lori L. Pollock. A case study of automatically creating test suites from web application field data. volume 2006, pages 1–9, Portland, ME, 2006. cited By 18; Conference of 2006 Workshop on Testing, Analysis, and Verification of Web Services and Applications, TAV WEB'06; Conference Date: 17 July 2006 Through 20 July 2006; Conference Code:69534.

[SH09]

Michele Sama and Julian Harty. Using code instrumentation to enhance testing on j2me: A lesson learned with jinjector. Santa Cruz, CA, 2009. cited By 1; Conference of 10th Workshop on Mobile Computing Systems and Applications, HotMobile'09; Conference Date: 23 February 2009 Through 24 February 2009; Conference Code:76371.

[SHJC15]

Kwangsik Song, Ahrim Han, Sehun Jeong, and Sungdeok Cha. Generating various contexts from permissions for testing android applications. volume 2015-January, pages 87–92. Knowledge Systems Institute Graduate School, 2015. cited By 5; Conference of 27th International Conference on Software Engineering and Knowledge Engineering, SEKE 2015; Conference Date: 6 July 2015 Through 8 July 2015; Conference Code:121351.

[SHS08]

Zafar U. Singhera, Ellis Horowitz, and Abad Ali Shah. A graphical user interface (gui) testing methodology. *International Journal of Information Technology and Web Engineering*, 3(2):1–17, 2008. cited By 7.

[SHW16]

Thiago R. Silva, Jean Luc Hak, and Marco Alba A. Winckler. Testing prototypes and final user interfaces through an ontological perspective for behavior-driven development. *HCSE - HESSD*, 9856 LNCS:86–107, 2016. cited By 10; Conference of IFIP WG 13.2/13.5 Joint 6th International Conference on Human-Centered Software Engineering, HCSE 2016 and 8th International Conference on Human Error, Safety, and System Development, HESSD

2016; Conference Date: 29 August 2016 Through 31 August 2016; Conference Code:<br/>180489.

[SHW17a]

Thiago R. Silva, Jean Luc Hak, and Marco Alba A. Winckler. A behavior-based ontology for supporting automated assessment of interactive systems. pages 250–257. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 9; Conference of 11th IEEE International Conference on Semantic Computing, ICSC 2017; Conference Date: 30 January 2017 Through 1 February 2017; Conference Code:127097.

[SHW17b]

Thiago R. Silva, Jean Luc Hak, and Marco Alba A. Winckler. A formal ontology for describing interactive behaviors and supporting automated testing on user interfaces. *International Journal of Semantic Computing*, 11(4):513–539, 2017. cited By 5.

[SI16]

Ibrahim Anka Salihu and Rosziati Ibrahim. Systematic exploration of android apps' events for automated testing. pages 50–54. Association for Computing Machinery, 2016. cited By 5; Conference of 14th International Conference on Advances in Mobile Computing and Multimedia, MoMM 2016; Conference Date: 28 November 2016 Through 30 November 2016; Conference Code:126323.

 $[SIA^+19]$ 

Ibrahim Anka Salihu, Rosziati Ibrahim, Bestoun S. Ahmed, K. Z. Zamli, and Asmau Usman. Amoga: A static-dynamic model generation strategy for mobile apps testing. *IEEE Access*, 7:17158–17173, 2019. cited By 6.

[SIM17]

Ibrahim Anka Salihu, Rosziati Ibrahim, and Aida Mustapha. A hybrid approach for reverse engineering gui model from android apps for automated testing. *Journal of Telecommunication, Electronic and Computer Engineering*, 9(3-3 Special Issue):45–49, 2017. cited By 4.

[SIU18]

Ibrahim Anka Salihu, Rosziati Ibrahim, and Asmau Usman. A static-dynamic approach for ui model generation for mobile applications. pages 96–100. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 7th International Conference on Reliability, Infocom Technologies and Optimization: Trends and Future Directions, ICRITO 2018; Conference Date: 29 August 2018 Through 31 August 2018; Conference Code:149167.

[SJ04]

Yanhong Sun and Edward L. Jones. Specification-driven automated testing of gui-based java programs. pages 140–145, Huntsville, AL, 2004. cited By 29; Conference of 42nd Annual Southeast Regional Conference, ACM-SE 42; Conference Date: 2 April 2004 Through 3 April 2004; Conference Code: 80485.

 $[SKB^{+}20a]$ 

Alper Silistre, Onur Kilincceker, Fevzi Belli, Moharram Challenger, and Geylani Kardas. Community detection in modelbased testing to address scalability: Study design. pages 657–660. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 15th Federated Conference on Computer Science and Information Systems, FedCSIS 2020; Conference Date: 6 September 2020 Through 9 September 2020; Conference Code:164056.

[SKB<sup>+</sup>20b]

Alper Silistre, Onur Kilincceker, Fevzi Belli, Moharram Challenger, and Geylani Kardas. Models in graphical user interface testing: Study design. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 14th Turkish National Software Engineering Symposium, UYMS 2020; Conference Date: 7 October 2020 Through 9 October 2020; Conference Code:164914. Daniel Sinnig, Ferhat Khendek, and Patrice Chalin. A formal model for generating integrated functional and user interface test cases. pages 255–264, Paris, 2010. cited By 3; Conference of 3rd International Conference on Software Testing, Verification and Validation, ICST 2010; Conference Date: 7 April 2010 Through 9 April 2010; Conference Code:81067.

[SLBW16]

[SKC10]

Christoph Schulze, Mikael Lindvall, Sigurthor Bjorgvinsson, and Robert E. Wiegand. Model generation to support model-based testing applied on the nasa dat web-application - an experience report. pages 77–87. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 3; Conference of 26th IEEE International Symposium on Software Reliability Engineering, ISSRE 2015; Conference Date: 2 November 2015 Through 5 November 2015; Conference Code:119083.

[SLRT14]

Andrea Stocco, Maurizio Leotta, Filippo Ricca, and Paolo Tonella. Pesto: A tool for migrating dom-based to visual web tests. pages 65–70. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 15; Conference of 14th IEEE International Working Conference on Source Code Analysis and Manipulation, SCAM 2014; Conference Date: 28 September 2014 Through 29 September 2014; Conference Code:109634.

 $[SMC^+17]$ 

Ting Su, Guozhu Meng, Yuting Chen, Ke Wu, Weiming Yang, Yao Yao, Geguang Pu, Yang Liu, and Zhendong Su. Guided, stochastic model-based gui testing of android apps. volume Part F130154, pages 245–256. Association for Computing Machinery, 2017. cited By 99; Conference of 11th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE 2017; Conference Date: 4 September 2017 Through 8 September 2017; Conference Code:130154.

[SMT15]

Jose Lorenzo San Miguel and Shingo Takada. Generating test cases for android applications through gui modeling, usage modeling, and change analysis. volume 13-17-July-2015, pages 146–147. Association for Computing Machinery, 2015. cited By 1; Conference of 8th International C Conference on Computer Science and Software Engineering, C3S2E 2015; Conference Date: 13 July 2015 Through 15 July 2015; Conference Code:116074.

[SOKN20]

Aleksander Sadaj, Mirosław Ochodek, Sylwia Kopczyńska, and Jerzy R. Nawrocki. Maintainability of automatic acceptance tests for web applications—a case study comparing two approaches to organizing code of test cases. 46th International Conference on Current Trends in Theory and Practice of Computer Science, SOFSEM 2020, 12011 LNCS:454–466, 2020. cited By 0; Conference of 46th International Conference on Current Trends in The-

ory and Practice of Computer Science, SOFSEM 2020; Conference Date: 20 January 2020 Through 24 January 2020; Conference Code:236569. [SP14] Clara Sacramento and Ana C.R. Paiva. Web application model generation through reverse engineering and ui pattern inferring. pages 105–115. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 19; Conference of 9th International Conference on the Quality of Information and Communications Technology, QUATIC 2014; Conference Date: 23 September 2014 Through 26 September 2014; Conference Code:109826. [SPA+19] Dionny Santiago, Justin Phillips, Patrick Alt, Brian Muras, Tariq M. King, and Peter J. Clarke. Machine learning and constraint solving for automated form testing. volume 2019-October, pages 217-227. IEEE Computer Society, 2019. cited By 0; Conference of 30th IEEE International Symposium on Software Reliability Engineering, ISSRE 2019; Conference Date: 28 October 2019 Through 31 October 2019; Conference Code:157630. [Spe98] Ivor T.A. Spence. Specification for testing - the removal of abstraction. Software Testing Verification and Reliability, 8(1):3-14, 1998. cited By 0. [SPS11] Sara E. Sprenkle, Lori L. Pollock, and Lucy M. Simko. A study of usage-based navigation models and generated abstract test cases for web applications. pages 230-239, Berlin, 2011. cited By 16; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation, ICST 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:85144. [SQF08] Mate Sztipanovits, Kai Qian, and Xiang Fu. The automated web application testing (awat) system. pages 88–93, Auburn, AL, 2008. cited By 11; Conference of 46th Annual Southeast Regional Conference on XX, ACM-SE 46; Conference Date: 28 March 2009 Through 29 March 2009; Conference Code:77926. [SQH17] Wei Song, Xiangxing Qian, and Jeff Huang. Ehbdroid: Beyond gui testing for android applications. pages 27-37. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 28; Conference of 32nd IEEE/ACM International Conference on Automated Software Engineering, ASE 2017; Conference Date: 30 October 2017 Through 3 November 2017; Conference Code:132671. [SRZ13] Matthias Schur, Andreas Roth, and Andreas Zeller. Mining behavior models from enterprise web applications. pages 422–432, Saint Petersburg, 2013. cited By 38; Conference of 2013 9th Joint Meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, ESEC/FSE 2013; Conference Date: 18 August 2013 Through 26 August 2013; Conference Code:99148. [SRZ14] Matthias Schur, Andreas Roth, and Andreas Zeller. Procrawl:

Mining test models from multi-user web applications. pages 413–416. Association for Computing Machinery, Inc, 2014. cited By 6; Conference of 23rd International Symposium on Software Test-

ing and Analysis, ISSTA 2014; Conference Date: 21 July 2014 Through 25 July 2014; Conference Code:113465. [SRZ15] Matthias Schur, Andreas Roth, and Andreas Zeller. Mining workflow models from web applications. IEEE Transactions on Software Engineering, 41(12):1184-1201, 2015. cited By 15. Richard K. Shehady and Daniel P. Siewiorek. A method to [SS97] automate user interface testing using variable finite state machines. pages 80–88. Institute of Electrical and Electronics Engineers Inc., 1997. cited By 93; Conference of 27th Annual International Symposium on Fault-Tolerant Computing, FTCS 1997; Conference Date: 24 June 1997 Through 27 June 1997; Conference Code:142051. [SSEA17] Sathyanarayanan Subramanian, Thomas Singleton, and Omar El-Ariss. Class coverage gui testing for android applications. pages 84–89. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 0; Conference of 2016 International Conference on System Reliability and Science, ICSRS 2016; Conference Date: 15 November 2016 Through 18 November 2016; Conference Code:125950. [SXX18] Fei Song, Zhuoming Xu, and Feng Xu. An xpath-based approach to reusing test scripts for android applications. volume 2018-January, pages 143–148. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 14th Web Information Systems and Applications Conference, WISA 2017; Conference Date: 11 November 2017 Through 12 November 2017; Conference Code:135787. [SY14] Sandeep Sivanandan and C. B. Yogeesha. Agile development cycle: Approach to design an effective model based testing with behaviour driven automation framework. pages 22–25. Institute of Electrical and Electronics Engineers Inc., 2014. cited By 9; Conference of 2014 20th Annual International Conference on Advanced Computing and Communications, ADCOM 2014; Conference Date: 19 September 2014 Through 22 September 2014; Conference Code:112193. [SYM18a] Andrea Stocco, Rahulkrishna Yandrapally, and Ali Mesbah. Vista: Web test repair using computer vision. pages 876–879. Association for Computing Machinery, Inc, 2018. cited By 3; Conference of 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2018; Conference Date: 4 November 2018 Through 9 November 2018; Conference Code:142072. [SYM18b] Andrea Stocco, Rahulkrishna Yandrapally, and Ali Mesbah. Visual web test repair. pages 503-514. Association for Computing Machinery, Inc, 2018. cited By 20; Conference of 26th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2018; Conference Date: 4 November 2018 Through 9 November 2018; Conference Code:142072. Jinlei Sun, Shiwen Zhang, Song Huang, and Zhanwei Hui. Design [SZHH18]

and application of a sikuli based capture-replay tool. pages 42–44. Institute of Electrical and Electronics Engineers Inc., 2018. cited

By 2; Conference of 18th IEEE International Conference on Software Quality, Reliability, and Security Companion, QRS-C 2018; Conference Date: 16 July 2018 Through 20 July 2018; Conference Code:138585. [SZJC16] Chenglong Sun, Zhenyu Zhang, Bo Jiang, and Wing Kwong Chan. Facilitating monkey test by detecting operable regions in rendered gui of mobile game apps. pages 298-306. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 3; Conference of 2nd IEEE International Conference on Software Quality, Reliability and Security, QRS 2016; Conference Date: 1 August 2016 Through 3 August 2016; Conference Code:124291. [SZZ<sup>+</sup>19] Yulei Sui, Yifei Zhang, Wei Zheng, Manqing Zhang, and Jingling Xue. Event trace reduction for effective bug replay of android apps via differential gui state analysis. pages 1095–1099. Association for Computing Machinery, Inc, 2019. cited By 1; Conference of 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2019; Conference Date: 26 August 2019 Through 30 August 2019; Conference Code:150532. [S5]Tomasz Straszak and Michał Śmiałek. Model-driven acceptance test automation based on use cases. Computer Science and Information Systems, 12(2):707-728, 2015. cited By 5.  $[TAA^+19]$ Porfirio Tramontana, Domenico Amalfitano, Nicola Amatucci, Atif M. Memon, and Anna Rita Fasolino. Developing and evaluating objective termination criteria for random testing. ACM Transactions on Software Engineering and Methodology, 28(3), 2019. cited By 3. [TAF20] Porfirio Tramontana, Nicola Amatucci, and Anna Rita Fasolino. A technique for parallel gui testing of android applications. International Conference on Testing Software and Systems, ICTSS, 12543 LNCS:169–185, 2020. cited By 0; Conference of 32nd IFIP WG 6.1 International Conference on Testing Software and Systems, ICTSS 2020; Conference Date: 9 December 2020 Through 11 December 2020; Conference Code:252699. [TAK09] Ed Triou, Zafar Abbas, and Sravani Kothapalle. Declarative testing: A paradigm for testing software applications. pages 769–773, Las Vegas, NV, 2009. cited By 5; Conference of 6th International Conference on Information Technology: New Generations, ITNG 2009; Conference Date: 27 April 2009 Through 29 April 2009; Conference Code:79848.  $[TDS^+13]$ Suresh Thummalapenta, Pranavadatta Devaki, Saurabh Sinha, Satish Chandra, Sivagami Gnanasundaram, Deepa D. Nagaraj, Sampath Kumar, and Sathish Ashwin Kumar. Efficient and change-resilient test automation: An industrial case study. pages 1002-1011, San Francisco, CA, 2013. cited By 26; Conference of 2013 35th International Conference on Software Engineering, ICSE 2013; Conference Date: 18 May 2013 Through 26 May 2013; Conference Code:100317. [TETPQ08] Matthew A. Thornton, Stephen H. Edwards, Roy Patrick Tan, and Manuel A. Pérez-Quiñones. Supporting student-written tests

of gui programs. pages 537–541, Portland, OR, 2008. cited By 22; Conference of 39th ACM Technical Symposium on Computer Science Education, SIGCSE 2008; Conference Date: 12 March 2008 Through 15 March 2008; Conference Code:74451.

[TG16a]

Chuanqi Tao and Jerry Zeyu Gao. Building a model-based gui test automation system for mobile applications. *International Journal of Software Engineering and Knowledge Engineering*, 26(9-10):1605–1615, 2016. cited By 3.

[TG16b]

Chuanqi Tao and Jerry Zeyu Gao. On building test automation system for mobile applications using gui ripping. volume 2016-January, pages 480–485. Knowledge Systems Institute Graduate School, 2016. cited By 2; Conference of 28th International Conference on Software Engineering and Knowledge Engineering, SEKE 2016; Conference Date: 1 July 2016 Through 3 July 2016; Conference Code:123620.

[TK02]

Juichi Takahashi and Yoshiaki Kakuda. Effective automated testing: A solution of graphical object verification. volume 2002-January, pages 284–291. IEEE Computer Society, 2002. cited By 0; Conference of 11th Asian Test Symposium, ATS 2002; Conference Date: 18 November 2002 Through 20 November 2002; Conference Code:116244.

[TK19]

Aditya Atul Tirodkar and Sundeep Singh Khandpur. Earlgrey: Ios ui automation testing tool. pages 16–19. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 0; Conference of 6th IEEE/ACM International Conference on Mobile Software Engineering and Systems, MOBILESoft 2019; Conference Date: 25 May 2019; Conference Code:151425.

[TKH11]

Tommi Takala, Mika Katara, and Julian Harty. Experiences of system-level model-based gui testing of an android application. pages 377–386, Berlin, 2011. cited By 88; Conference of 4th IEEE International Conference on Software Testing, Verification, and Validation, ICST 2011; Conference Date: 21 March 2011 Through 25 March 2011; Conference Code:85144.

 $[TLS^+13]$ 

Suresh Thummalapenta, K. Vasanta Lakshmi, Saurabh Sinha, Nishant Sinha, and Satish Chandra. Guided test generation for web applications. pages 162–171, San Francisco, CA, 2013. cited By 34; Conference of 2013 35th International Conference on Software Engineering, ICSE 2013; Conference Date: 18 May 2013 Through 26 May 2013; Conference Code:100317.

[TMK09a]

Tommi Takala, Mika Maunumaa, and Mika Katara. An adapter framework for keyword-driven testing. pages 201–210, Jeju, 2009. cited By 5; Conference of 9th International Conference on Quality Software, QSIC 2009; Conference Date: 24 August 2009 Through 25 August 2009; Conference Code:79738.

 $[TMK^+09b]$ 

Tugkan Tuglular, Can Arda Müftüoğlu, Özgür Kaya, Fevzi Belli, and Michael Linschulte. Gui-based testing of boundary overflow vulnerability. volume 2, pages 539–544, Seattle, WA, 2009. cited By 4; Conference of 2009 33rd Annual IEEE International Computer Software and Applications Conference, COMPSAC 2009;

[UVM08]

Conference Date: 20 July 2009 Through 24 July 2009; Conference Code:78413.  $[TSD^+12]$ Suresh Thummalapenta, Nimit Singhania, Pranavadatta Devaki, Saurabh Sinha, Satish Chandra, Achin K. Das, and Srinivas Mangipudi. Efficiently scripting change-resilient tests. Cary, NC, 2012. cited By 7; Conference of 20th ACM SIGSOFT International Symposium on the Foundations of Software Engineering, FSE 2012 ; Conference Date: 11 November 2012 Through 16 November 2012; Conference Code:94505. [TWWZ16] Hongvin Tang, Guoqquan Wu, Jun Wei, and Hua Zhong. Generating test cases to expose concurrency bugs in android applications. pages 648-653. Association for Computing Machinery, Inc, 2016. cited By 14; Conference of 31st IEEE/ACM International Conference on Automated Software Engineering, ASE 2016; Conference Date: 3 September 2016 Through 7 September 2016; Conference [TZJ13] Jingfan Tang, Qin Zhu, and Ming Jiang. Towards an interfacebased automation testing framework for sirverlight applications. Information Technology Journal, 12(4):829–834, 2013. cited By 0. [Tö11] Arne Michael Törsel. Automated test case generation for web applications from a domain specific model. pages 137–142, Mucited By 13; Conference of 35th Annual IEEE International Computer Software and Applications Conference Workshops, COMPSACW 2011; Conference Date: 18 July 2011 Through 21 July 2011; Conference Code:87007. [UIS18] Asmau Usman, Noraini Ibrahim, and Ibrahim Anka Salihu. Test case generation from android mobile applications focusing on context events. pages 25–30. Association for Computing Machinery, 2018. cited By 6; Conference of 7th International Conference on Software and Computer Applications, ICSCA 2018; Conference Date: 8 February 2018 Through 10 February 2018; Conference Code:136540. [UIS20] Asmau Usman, Noraini Ibrahim, and Ibrahim Anka Salihu. Tegdroid: Test case generation approach for android apps considering context and gui events. International Journal on Advanced Science, Engineering and Information Technology, (1):16-23, 2020. cited By 0. [UM11] Andrej Ušaniov and Kstutis Motiejunas. A method for automated testing of software interface. Information Technology and Control, 40(2):99-109, 2011. cited By 3. [USS19] Najam Us-Saqib and Sara Shahzad. Functionality, performance, and compatibility testing: A model based approach. 170-175. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 1; Conference of 16th International Conference on Frontiers of Information Technology, FIT 2018; Conference Date: 17 December 2018 Through 19 December 2018; Conference Code:144465.

Siba K. Udgata, Srinivasulu Vanam, and M. N Venu Madhav. Regression based automated test tool for web portals. Hyderabad, 2008. cited By 3; Conference of 2008 IEEE Region 10 Conference,

TENCON 2008; Conference Date: 19 November 2008 Through 21 November 2008; Conference Code:75688.

[VA17]

Tanja E.J. Vos and Pekka Aho. Searching for the best test. pages 3–4. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 1; Conference of 10th IEEE/ACM International Workshop on Search-Based Software Testing, SBST 2017; Conference Date: 22 May 2017 Through 23 May 2017; Conference Code:129083.

[vdMKNW15]

A. P. van der Meer, R. Kherrazi, Neda Noroozi, and A. Wierda. The synergy between user experience design and software testing. 13th International Conference on Software Engineering and Formal Methods, SEFM 2015, 9509:11–21, 2015. cited By 0; Conference of 13th International Conference on Software Engineering and Formal Methods, SEFM 2015; Conference Date: 7 September 2015 Through 8 September 2015; Conference Code:161349.

[VGVS18]

Denis Vajak, Ratko Grbíc, Mario Vranješ, and Dejan Stefanović. Environment for automated functional testing of mobile applications. pages 125–130. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 0; Conference of 3rd International Conference on Smart Systems and Technologies, SST 2018; Conference Date: 10 October 2018 Through 12 October 2018; Conference Code:143493.

[VH15]

Juha Matti Vanhatupa and Mikko Heikkinen. Automatizing android unit and user interface testing. International Conference on Extreme Programming and Agile Processes in Software Engineering, XP, 212:373–374, 2015. cited By 0; Conference of 16th International Conference on Agile Software Development, XP 2015; Conference Date: 25 May 2015 Through 29 May 2015; Conference Code:142639.

[Vie05]

Marlon E.R. Vieira. Invited presentation ii: Experiences in applying model based system testing generation. International Conference on Model Driven Engineering Languages and Systems, MoDELS, 3713 LNCS:430, 2005. cited By 0; Conference of 8th International Conference on Model Driven Engineering Languages and Systems, MoDELS 2005; Conference Date: 2 October 2005 Through 7 October 2005; Conference Code:67236.

 $[VKC^+15]$ 

Tanja E.J. Vos, Peter M. Krüse, Nelly Condori, Sebastian Bauersfeld, and Joachim Wegener. Testar: Tool support for test automation at the user interface level. *International Journal of Information System Modeling and Design*, 6(3):46–83, 2015. cited By 37.

 $[VLH^+06]$ 

Marlon E.R. Vieira, Johanne Leduc, Bill Hasling, Rajesh Subramanyan, and Jürgen Kazmeier. Automation of gui testing using a model-driven approach. pages 9–14, Shanghai, 2006. cited By 59; Conference of 1st International Workshop on Automation of Software Test, AST'06, Co-located with the 28th International Conference on Software Engineering, ICSE 2009; Conference Date: 20 May 2006 Through 28 May 2006; Conference Code:80599.

[VP13]

E. Vijayakumar and Muthusamy Punithavalli. Enhanced approaches to improve graphical user interface testing process. *Jour-*

 $nal\ of\ Engineering\ and\ Applied\ Sciences,\ 8(5):172–176,\ 2013.$ cited By 0.

Tuyet Vuong and Shingo Takada. Semantic analysis for deep q-network in android gui testing. volume 2019-July, pages 123–128. Knowledge Systems Institute Graduate School, 2019. cited By 3; Conference of 31st International Conference on Software Engineering and Knowledge Engineering, SEKE 2019; Conference Date: 10 July 2019 Through 12 July 2019; Conference Code:150462.

Lee James White and Husain Almezen. Generating test cases for gui responsibilities using complete interaction sequences. pages 110–121, San Jose, CA, USA, 2000. IEEE, Los Alamitos, CA, United States. cited By 131; Conference of 11th International Symposium on Software Reliability Engineering (ISSRE 2000); Conference Date: 8 October 2000 Through 11 October 2000; Conference Code: 57707.

Lee James White, Husain Almezen, and Nasser Alzeidi. User-based testing of gui sequences and their interactions. *Proceedings of the International Symposium on Software Reliability Engineering, ISSRE*, pages 54–63, 2001. cited By 55.

Neil Walkinshaw. Improving automated gui testing by learning to avoid infeasible tests. pages 107–114. Institute of Electrical and Electronics Engineers Inc., 2020. cited By 0; Conference of 2nd IEEE International Conference on Artificial Intelligence Testing, AITest 2020; Conference Date: 3 August 2020 Through 6 August 2020; Conference Code:162653.

Tanapuch Wanwarang, Nataniel P. Borges, Leon Bettscheider, and Andreas Zeller. Testing apps with real-world inputs. pages 1–10. Association for Computing Machinery, 2020. cited By 1; Conference of 2020 IEEE/ACM 1st International Conference on Automation of Software Test, AST 2020; Conference Date: 15 July 2020 Through 16 July 2020; Conference Code:162963.

Wenyu Wang, Yurui Cao, Dengfeng Li, Zhenwen Zhang, Yuetang Deng, Wei Yang, and Tao Xie. An empirical study of android test generation tools in industrial cases. pages 738–748. Association for Computing Machinery, Inc, 2018. cited By 22; Conference of 33rd IEEE/ACM International Conference on Automated Software Engineering, ASE 2018; Conference Date: 3 September 2018 Through 7 September 2018; Conference Code:140337.

Thomas D. White, Gordon Fraser, and Guy J. Brown. Improving random gui testing with image-based widget detection. pages 307–317. Association for Computing Machinery, Inc, 2019. cited By 8; Conference of 28th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2019; Conference Date: 15 July 2019 Through 19 July 2019; Conference Code:149531.

Lee James White. Regression testing of gui event interactions. pages 350–358, Monterey, CA, USA, 1996. IEEE, Piscataway. cited By 42; Conference of Proceedings of the 1996 International Conference on Software Maintenance, ICSM, ICSM; Conference Date: 4 November 1996 Through 8 November 1996; Conference Code:45809.

[WA00]

[VT19]

[WAA01]

[Wal20]

[WBBZ20]

 $[WCL^{+}18]$ 

[WFB19]

[Whi96]

 $[WJX^{+}16]$ 

Xiangyu Wu, Yanyan Jiang, Chang Xu, Chun Cao, Xiaoxing Ma, and Jian Lü. Testing android apps via guided gesture event generation. volume 0, pages 201–208. IEEE Computer Society, 2016. cited By 5; Conference of 23rd Asia-Pacific Software Engineering Conference, APSEC 2016; Conference Date: 6 December 2016 Through 9 December 2016; Conference Code:127157.

[WK18]

Supaket Wongkampoo and Supaporn Kiattisin. Atom-task precondition technique to optimize large scale gui testing time based on parallel scheduling algorithm. pages 229–232. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 2; Conference of 21st International Computer Science and Engineering Conference, ICSEC 2017; Conference Date: 15 November 2017 Through 18 November 2017; Conference Code:138947.

[WL12]

Yumei Wu and Zhifang Liu. A model based testing approach for mobile device. pages 1885–1888, Xi'an, 2012. cited By 4; Conference of 2012 International Conference on Industrial Control and Electronics Engineering, ICICEE 2012; Conference Date: 23 August 2012 Through 25 August 2012; Conference Code:93896.

 $[WLY^+14]$ 

Peng Wang, Bin Liang, Wei You, Jingzhe Li, and Wenchang Shi. Automatic android gui traversal with high coverage. pages 1161–1166, Bhopal, 2014. IEEE Computer Society. cited By 19; Conference of 2014 4th International Conference on Communication Systems and Network Technologies, CSNT 2014; Conference Date: 7 April 2014 Through 9 April 2014; Conference Code:105702.

[WNX09]

Zeng Wandan, Jiang Ningkang, and Zhou Xubo. Design and implementation of a web application automation testing framework. volume 2, pages 316–318, Shenyang, 2009. cited By 3; Conference of 2009 9th International Conference on Hybrid Intelligent Systems, HIS 2009; Conference Date: 12 August 2009 Through 14 August 2009; Conference Code:78414.

[WR16]

Yan Wang and Atañas Rountev. Profiling the responsiveness of android applications via automated resource amplification. pages 48–58. Association for Computing Machinery, Inc, 2016. cited By 11; Conference of IEEE/ACM International Conference on Mobile Software Engineering and Systems, MobileSoft 2016; Conference Date: 16 May 2016 Through 17 May 2016; Conference Code:122876.

[WR17]

Thomas Wetzlmaier and Rudolf Ramler. Hybrid monkey testing: Enhancing automated gui tests with random test generation. pages 5–10. Association for Computing Machinery, Inc, 2017. cited By 5; Conference of 8th ACM SIGSOFT International Workshop on Automated Software Testing, A-TEST 2017, co-located with the International ESEC/FSE Conference, FSE 2017; Conference Date: 4 September 2017 Through 5 September 2017; Conference Code:138675.

[WRP16]

Thomas Wetzlmaier, Rudolf Ramler, and Werner Putschögl. A framework for monkey gui testing. pages 416–423. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 9; Conference of 9th IEEE International Conference on Software Testing,

Verification and Validation, ICST 2016; Conference Date: 10 April 2016 Through 15 April 2016; Conference Code:122841.

[WW15]

Thomas Wetzlmaier and Mario Winterer. Test automation for multi-touch user interfaces of industrial applications. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 3; Conference of 2015 8th IEEE International Conference on Software Testing, Verification and Validation Workshops, ICSTW 2015; Conference Date: 13 April 2015 Through 17 April 2015; Conference Code:112292.

[WW19]

Junmei Wang and Jihong Wu. Research on mobile application automation testing technology based on appium. pages 247–250. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 0; Conference of 2019 International Conference on Virtual Reality and Intelligent Systems, ICVRIS 2019; Conference Date: 14 September 2019 Through 15 September 2019; Conference Code:155690.

[WWR18]

Haowei Wu, Yan Wang, and Atañas Rountev. Sentinel: Generating gui tests for android sensor leaks. pages 27–33. IEEE Computer Society, 2018. cited By 5; Conference of 13th ACM/IEEE International Workshop on Automation of Software Test, AST 2018; Conference Date: 28 May 2018 Through 29 May 2018; Conference Code:137727.

[WWXC09]

Tao Wu, Yanling Wan, Yishan Xi, and Chuanbo Chen. Study on the automatic test framework based on three-tier data driven mechanism. pages 996–1001, Shanghai, 2009. cited By 1; Conference of 8th IEEE/ACIS International Conference on Computer and Information Science, ICIS 2009; Conference Date: 1 June 2009 Through 3 June 2009; Conference Code:78070.

[WX10]

Zheng Wei and Wu Xiaoxue. Graph theory model based automatic test platform design. pages 263–267, Chengdu, 2010. cited By 0; Conference of International Conference on Software Engineering and Data Mining, SEDM; Conference Date: 23 June 2010 Through 25 June 2010; Conference Code:81677.

 $[WXZ^+19]$ 

Yaohui Wang, Hui Xu, Yangfan Zhou, Michael Rung Tsong Lyu, and Xin Wang. Textout: Detecting text-layout bugs in mobile apps via visualization-oriented learning. volume 2019-October, pages 239–249. IEEE Computer Society, 2019. cited By 0; Conference of 30th IEEE International Symposium on Software Reliability Engineering, ISSRE 2019; Conference Date: 28 October 2019 Through 31 October 2019; Conference Code:157630.

[WYC16]

Bin Wang, Beibei Yin, and Kaiyuan Cai. Event handler tree model for gui test case generation. volume 2, pages 58–63. IEEE Computer Society, 2016. cited By 3; Conference of 2016 IEEE 40th Annual Computer Software and Applications Conference, COMPSAC 2016; Conference Date: 10 June 2016 Through 14 June 2016; Conference Code:123590.

 $[WYD^+19]$ 

Ping Wang, Jiwei Yan, Xi Deng, Jun Yan, and Jian Zhang. Understanding ineffective events and reducing test sequences for android applications. pages 264–272. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 1; Conference of 13th Interna-

tional Symposium on Theoretical Aspects of Software Engineering, TASE 2019; Conference Date: 29 July 2019 Through 31 July 2019; Conference Code:155650. [WZ07] Dawid Weiss and Marcin Zduniak. Automated integration tests for mobile applications in java 2 micro edition. 10th International Conference on Business Information Systems, BIS 2007, 4439 LNCS:478-487, 2007. cited By 9; Conference of 10th International Conference on Business Information Systems, BIS 2007; Conference Date: 25 April 2007 Through 27 April 2007; Conference Code:71058. [WZWR20]Haowei Wu, Hailong Zhang, Yan Wang, and Atañas Rountev. Sentinel: generating gui tests for sensor leaks in android and android wear apps. Software Quality Journal, 28(1):335–367, 2020. cited By 0. [XFX<sup>+</sup>20] Mulong Xie, Sidong Feng, Zhenchang Xing, Jieshan Chen, and Chunyang Chen. Uied: A hybrid tool for gui element detection. pages 1655–1659. Association for Computing Machinery, Inc, 2020. cited By 0; Conference of 28th ACM Joint Meeting European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2020; Conference Date: 8 November 2020 Through 13 November 2020; Conference Code:164831. [XGF08] Qing Xie, Mark Grechanik, and Chen Fu. Rest: A tool for reducing effort in script-based testing. pages 468-469, Beijing, 2008. cited By 14; Conference of 24th International Conference on Software Maintenance, ICSM 2008; Conference Date: 28 September 2008 Through 4 October 2008; Conference Code:74519. [XGFC09] Qing Xie, Mark Grechanik, Chen Fu, and Chad M. Cumby. Guide: A gui differentiator. pages 395–396, Edmonton, AB, 2009. cited By 11; Conference of 2009 International Conference on Software Maintenance, ICSM 2009; Conference Date: 20 September 2009 Through 26 September 2009; Conference Code:78644. [Xie06] Qing Xie. Developing cost-effective model-based techniques for gui testing. volume 2006, pages 997–1000, Shanghai, 2006. IEEE Computer Society. cited By 24; Conference of 28th International Conference on Software Engineering 2006, ICSE '06; Conference Date: 20 May 2006 Through 28 May 2006; Conference Code:69469. [XJ09] Xuezhi Xing and Fan Jiang. Gui test case definition with ttcn-3. Wuhan, 2009. cited By 0; Conference of 2009 International Conference on Computational Intelligence and Software Engineering, CiSE 2009; Conference Date: 11 December 2009 Through 13 December 2009; Conference Code:79559. [XM05] Qing Xie and Atif M. Memon. Rapid "crash testing" for continuously evolving gui-based software applications. volume 2005, pages 473-482, Budapest, 2005. IEEE Computer Society. cited By 17; Conference of 21st International Conference on Software

[XM06]

Through 29 September 2005; Conference Code:67325. Qing Xie and Atif M. Memon. Model-based testing of community-driven open-source gui applications. pages 145–154, Philadelphia,

Maintenance, ICSM 2005; Conference Date: 26 September 2005

[XM07a]

[XM07b]

[XM08]

[Xu11]

[Xue20]

[XZW12]

 $[YAB^+19]$ 

[YASS19]

[YBC13]

PA, 2006. cited By 32; Conference of ICSM 2006: 22nd IEEE International Conference on Software Maintenance; Conference Date: 24 September 2006 Through 27 September 2006; Conference Code:69975. Qing Xie and Atif M. Memon. Designing and comparing automated test oracles for gui-based software applications. ACM Transactions on Software Engineering and Methodology, 16(1), 2007. cited By 113. Yuan Xun and Atif M. Memon. Using gui run-time state as feedback to generate test cases. pages 396-405, Minneapolis, MN, 2007. cited By 90; Conference of 29th International Conference on Software Engineering, ICSE 2007; Conference Date: 20 May 2007 Through 26 May 2007; Conference Code:70208. Qing Xie and Atif M. Memon. Using a pilot study to derive a gui model for automated testing. ACM Transactions on Software Engineering and Methodology, 18(2), 2008. cited By 75. Dianxiang Xu. A tool for automated test code generation from high-level petri nets. 32nd International Conference on Applications and Theory of Petri Nets and Other Models of Concurrency. PETRI NETS 2011, 6709 LNCS:308-317, 2011. cited By 28; Conference of 32nd International Conference on Applications and Theory of Petri Nets and Other Models of Concurrency, PETRI NETS 2011; Conference Date: 20 June 2011 Through 24 June 2011; Conference Code:85474. Feng Xue. Automated mobile apps testing from visual perspective. pages 577–581. Association for Computing Machinery, Inc. 2020. cited By 0; Conference of 29th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2020 ; Conference Date: 18 July 2020 Through 22 July 2020; Conference Code:161847. Yongjie Xu, Xiaodong Zhu, and Yigang Wang. Towards gui test based on interactive event-flow model. pages 222-226, Chengdu, 2012. cited By 2; Conference of 2012 International Conference on Quality, Reliability, Risk, Maintenance, and Safety Engineering, ICQR2MSE 2012; Conference Date: 15 June 2012 Through 18 June 2012; Conference Code:92813. Nazish Yousaf, Farooque Azam, Wasi Haider Butt, Muhammad Waseem Anwar, and Muhammad Rashid. Automated modelbased test case generation for web user interfaces (wui) from interaction flow modeling language (ifml) models. *IEEE Access*, 7:67331–67354, 2019. cited By 7. Suleiman Y. Yerima, Mohammed K. Alzaylaee, and Sakir Sakir Sezer. Machine learning-based dynamic analysis of android apps with improved code coverage. Eurasip Journal on Information Security, 2019(1), 2019. cited By 5. Zhongxing Yu, Chenggang Bai, and Kaiyuan Cai. Mutation-

oriented test data augmentation for gui software fault localization. Information and Software Technology, 55(12):2076–2098,

2013. cited By 5.

[YCM07] Xun Yuan, Myra B. Cohen, and Atif M. Memon. Covering array sampling of input event sequences for automated gui testing. pages 405-408, Atlanta, GA, 2007. cited By 49; Conference of 22nd IEEE/ACM International Conference on Automated Software Engineering, ASE'07; Conference Date: 5 November 2007 Through 9 November 2007; Conference Code:80761. [YCM09a] Tom Yeh, Tsunghsiang Chang, and Robert C. Miller. Sikuli: Using gui screenshots for search and automation. pages 183–192, Victoria, BC, 2009. cited By 217; Conference of 22nd Annual ACM Symposium on User Interface Software and Technology, UIST 2009 : Conference Date: 4 October 2009 Through 7 October 2009; Conference Code:78541. [YCM09b] Xun Yuan, Myra B. Cohen, and Atif M. Memon. Towards dynamic adaptive automated test generation for graphical user interfaces. pages 263–266, Denver, CO, 2009. cited By 14; Conference of International Conference on Software Testing, Verification, and Validation Workshops, ICSTW; Conference Date: 1 April 2009 Through 4 April 2009; Conference Code:76734. [YCM11] Xun Yuan, Myra B. Cohen, and Atif M. Memon. Gui interaction testing: Incorporating event context. IEEE Transactions on Software Engineering, 37(4):559–574, 2011. cited By 116. [YDSC08] Lu Yongzhong, Yan Danping, Nie Songlin, and Wang Chun. Development of an improved gui automation test system based on event-flow graph. volume 2, pages 712-715, Wuhan, Hubei, 2008. cited By 14; Conference of International Conference on Computer Science and Software Engineering, CSSE 2008; Conference Date: 12 December 2008 Through 14 December 2008; Conference Code:75355.  $[YFM^+19]$ Zhe Yu, Fahmid Morshed Fahid, Tim J. Menzies, Gregg Rothermel, Kyle Patrick, and Snehit Cherian. Terminator: Better automated ui test case prioritization. pages 883-894. Association for Computing Machinery, Inc, 2019. cited By 3; Conference of 27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2019; Conference Date: 26 August 2019 Through 30 August 2019; Conference Code:150532. [YFZ06] Mao Ye, Boqing Qin Feng, and Li Zhu. Bpr based graphical in-Electronics, 15(4 A):957–959, 2006. cited By 0.

terfaces verification for automated testing. Chinese Journal of

[YFZ07]

Mao Ye, Boqing Qin Feng, and Li Zhu. Automated oracle based on multi-weighted neural networks for gui testing. Information Technology Journal, 6(3):370–375, 2007. cited By 5.

[YHYH20]

Husam N. Yasin, Siti Hafizah Ab Hamid, Raja Jamilah Yusof, and Muzaffar Hamzah. An empirical analysis of test input generation tools for android apps through a sequence of events. Symmetry, 12(11):1-27, 2020. cited By 1.

[YLLY19]

Chengzen Yang, Chih Ju Lai, Peng Lu, and Zhijun You. Lad: A layout anomaly detector for android applications. volume 2019-July, pages 557-562. Knowledge Systems Institute Graduate School, 2019. cited By 1; Conference of 31st International

Conference on Software Engineering and Knowledge Engineering, SEKE 2019; Conference Date: 10 July 2019 Through 12 July 2019; Conference Code:150462.  $[YLP^+20]$ Jiwei Yan, Hao Liu, Linjie Pan, Jun Yan, Jian Zhang, and Bin Liang. Multiple-entry testing of android applications by constructing activity launching contexts. pages 457-468. IEEE Computer Society, 2020. cited By 1; Conference of 42nd ACM/IEEE International Conference on Software Engineering, ICSE 2020; Conference Date: 27 June 2020 Through 19 July 2020; Conference Code:163540. [YM08] Xun Yuan and Atif M. Memon. Alternating gui test generation and execution. pages 23-32, Windsor, 2008. cited By 14; Conference of Testing: Academic and Industrial Conference Practice and Research Techniques, TAIC PART 2008; Conference Date: 29 August 2008 Through 31 August 2008; Conference Code:74687. [YM10a] Xun Yuan and Atif M. Memon. Generating event sequence-based test cases using gui runtime state feedback. IEEE Transactions on Software Engineering, 36(1):81–95, 2010. cited By 90. [YM10b] Xun Yuan and Atif M. Memon. Iterative execution-feedback model-directed gui testing. Information and Software Technology, 52(5):559–575, 2010. cited By 30. [YPL+18] Jiwei Yan, Linjie Pan, Yaqi Li, Jun Yan, and Jian Zhang. Land: A user-friendly and customizable test generation tool for android apps. pages 360–363. Association for Computing Machinery, Inc, 2018. cited By 3; Conference of 27th ACM SIGSOFT International Symposium on Software Testing and Analysis, ISSTA 2018 ; Conference Date: 16 July 2018 Through 21 July 2018; Conference Code:138042. [YPM18] Masato Yamamoto, Evgeny Pyshkin, and Maxim Mozgovoy. Reducing false positives in automated opency-based non-native gui software testing. pages 41–45. Association for Computing Machinery, 2018. cited By 0; Conference of 3rd International Conference on Applications in Information Technology, ICAIT 2018 ; Conference Date: 1 November 2018 Through 3 November 2018; Conference Code:142422. [YPX13] Wei Yang, Mukul R. Prasad, and Tao Xie. A grey-box approach for automated gui-model generation of mobile applications. International Conference on Fundamental Approaches to Software Engineering, FASE, 7793 LNCS:250-265, 2013. cited By 185; Conference of 16th International Conference on Fundamental Approaches to Software Engineering, FASE 2013, Held as Part of the European Joint Conferences on Theory and Practice of Software, ETAPS 2013; Conference Date: 16 March 2013 Through 24 March 2013; Conference Code:95779. [YR91] Stephen W.L. Yip and David John Robson. Graphical user interfaces validation: A problem analysis and a strategy to solution. volume 2, pages 91–100. IEEE Computer Society, 1991. cited By

> 3; Conference of 24th Annual Hawaii International Conference on System Sciences, HICSS 1991; Conference Date: 8 January 1991

Through 11 January 1991; Conference Code:146842.

[YSS15]

Rahulkrishna Yandrapally, Giriprasad Sridhara, and Saurabh Sinha. Automated modularization of gui test cases. volume 1, pages 44–54. IEEE Computer Society, 2015. cited By 6; Conference of 37th IEEE/ACM International Conference on Software Engineering, ICSE 2015; Conference Date: 16 May 2015 Through 24 May 2015; Conference Code:116104.

[YT15]

Siena Yu and Shingo Takada. External event-based test cases for mobile application. volume 13-17-July-2015, pages 148–149. Association for Computing Machinery, 2015. cited By 2; Conference of 8th International C Conference on Computer Science and Software Engineering, C3S2E 2015; Conference Date: 13 July 2015 Through 15 July 2015; Conference Code:116074.

[YTSC14]

Rahulkrishna Yandrapally, Suresh Thummalapenta, Saurabh Sinha, and Satish Chandra. Robust test automation using contextual clues. pages 304–314. Association for Computing Machinery, Inc, 2014. cited By 28; Conference of 23rd International Symposium on Software Testing and Analysis, ISSTA 2014; Conference Date: 21 July 2014 Through 25 July 2014; Conference Code:113465.

[Yu18]

Jiujiu Yu. Design and application on agile software exploratory testing model. pages 2082–2088. Institute of Electrical and Electronics Engineers Inc., 2018. cited By 1; Conference of 2nd IEEE Advanced Information Management, Communicates, Electronic and Automation Control Conference, IMCEC 2018; Conference Date: 25 May 2018 Through 27 May 2018; Conference Code:140123.

 $[YVY^+19]$ 

Solomiya Yatskiv, Iryna Voytyuk, Nataliya Yatskiv, Oksana Kushnir, Yuliia Trufanova, and Valentyna Panasyuk. Improved method of software automation testing based on the robotic process automation technology. pages 293–296. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 6; Conference of 9th International Conference on Advanced Computer Information Technologies, ACIT 2019; Conference Date: 5 June 2019 Through 7 June 2019; Conference Code:150256.

[YW12]

Yepeng Yao and Xuren Wang. A distributed, cross-platform automation testing framework for gui-driven applications. pages 723–726, Changchun, 2012. cited By 1; Conference of 2nd International Conference on Computer Science and Network Technology, ICCSNT 2012; Conference Date: 29 December 2012 Through 31 December 2012; Conference Code:97797.

 $[YWZ^+18]$ 

Shengqian Yang, Haowei Wu, Hailong Zhang, Yan Wang, Chandrasekar Swaminathan, Dacong Yan, and Atañas Rountev. Static window transition graphs for android. *Automated Software Engineering*, 25(4):833–873, 2018. cited By 11.

 $[YXW^+17]$ 

Zhengwei Yu, Peng Xiao, Yumei Wu, Bin Liu, and Lijin Wu. A novel automated gui testing echnology based on image recognition. pages 144–149. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 1; Conference of 18th IEEE International Conference on High Performance Computing and Communications, 14th IEEE International Conference on Smart City

and 2nd IEEE International Conference on Data Science and Systems, HPCC/SmartCity/DSS 2016; Conference Date: 12 December 2016 Through 14 December 2016; Conference Code:126106. [YYM12] Jie Yin, Dan Yu, and Shilong Ma. An automatic testing framework applied on liw and implementation. Journal of Theoretical and Applied Information Technology, 46(2):648-653, 2012. cited By 0. [YYR13] Shengqian Yang, Dacong Yan, and Atañas Rountev. Testing for poor responsiveness in android applications. pages 1–6, San Francisco, CA, 2013. IEEE Computer Society. cited By 48; Conference of 2013 1st International Workshop on the Engineering of Mobile-Enabled Systems, MOBS 2013; Conference Date: 25 May 2013 Through 25 May 2013; Conference Code:100762. [YYWZ17] Jun Yan, Jiwei Yan, Tianyong Wu, and Jian Zhang. Widgetsensitive and back-stack-aware gui exploration for testing android apps. pages 42–53. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 7; Conference of 17th IEEE International Conference on Software Quality, Reliability and Security, QRS 2017; Conference Date: 25 July 2017 Through 29 July 2017; Conference Code:129990. [YZW<sup>+</sup>16] Shengqian Yang, Hailong Zhang, Haowei Wu, Yan Wang, Dacong Yan, and Atañas Rountev. Static window transition graphs for android. pages 658–668. Institute of Electrical and Electronics Engineers Inc., 2016. cited By 56; Conference of 30th IEEE/ACM International Conference on Automated Software Engineering, ASE 2015; Conference Date: 9 November 2015 Through 13 November 2015; Conference Code:118982.  $[ZCS^+20]$ Yixue Zhao, Justin Chen, Adriana Sejfia, Marcelo Schmitt Laser, Jie Zhang, Federica Sarro, Mark Harman, and Nenad Medvidović. Fruiter: A framework for evaluating ui test reuse. pages 1190-1201. Association for Computing Machinery, Inc, 2020. cited By 1; Conference of 28th ACM Joint Meeting European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2020; Conference Date: 8 November 2020 Through 13 November 2020; Conference Code:164831.  $[ZCT^+17]$ Chucheng Zhang, Haoliang Cheng, Enyi Tang, Xin Chen, Lei Bu, and Xuandong Li. Sketch-guided gui test generation for mobile applications. pages 38-43. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 3; Conference of 32nd IEEE/ACM International Conference on Automated Software Engineering, ASE 2017; Conference Date: 30 October 2017 Through 3 November 2017; Conference Code:132671. [ZDXQ19] Wenhua Zhao, Zhenkai Ding, Mingyuan Xia, and Zhengwei Qi. Systematically testing and diagnosing responsiveness for android apps. pages 449–453. Institute of Electrical and Electronics Engineers Inc., 2019. cited By 1; Conference of 2019 IEEE International Conference on Software Maintenance and Evolution, ICSME 2019 ; Conference Date: 30 September 2019 Through 4 October 2019; Conference Code:155692 [ZF20] Ilya B. Zarubin and Aleksander D. Filinskikh. Automation of selection of a pool of graphical interface regression tests for multi

	module information systems. volume 2744. CEUR-WS, 2020. cited By 0; Conference of 30th International Conference on Computer Graphics and Machine Vision, GraphiCon 2020; Conference Date: 22 September 2020 Through 25 September 2020; Conference Code:165807.
[ZG16]	Lei Zhao and Dongdong Gao. Gui test case generation based on activity-flow graph. volume 0, pages 738–741. IEEE Computer Society, 2016. cited By 2; Conference of 7th IEEE International Conference on Software Engineering and Service Science, ICSESS 2016; Conference Date: 26 August 2016 Through 28 August 2016; Conference Code:126924.
[ZL11]	Gabriel Lopez Zenarosa and Regis J. Leonard. Towards automated oracles for gui input validation. pages 113–114, Waikiki, Honolulu, HI, 2011. cited By 1; Conference of 6th International Workshop on Automation of Software Test, AST 2011, Co-located with ICSE 2011; Conference Date: 22 May 2011 Through 23 May 2011; Conference Code:85238.
[ZLE13]	Sai Zhang, Hao Lü, and Michael D. Ernst. Automatically repairing broken workflows for evolving gui applications. pages 45–55, Lugano, 2013. cited By 26; Conference of 22nd International Symposium on Software Testing and Analysis, ISSTA 2013; Conference Date: 15 July 2013 Through 20 July 2013; Conference Code: 98381.
[ZLG <sup>+</sup> 20]	Tao Zhang, Ying Liu, Jerry Zeyu Gao, Lipeng Gao, and Jing Cheng. Deep learning-based mobile application isomorphic gui identification for automated robotic testing. <i>IEEE Software</i> , 37(4):67–74, 2020. cited By 0.
[ZLZ <sup>+</sup> 16]	Xia Zeng, Dengfeng Li, Wujie Zheng, Fan Xia, Yuetang Deng, Wing Lam, Wei Yang, and Tao Xie. Automated test input generation for android: Are we really there yet in an industrial case? volume 13-18-November-2016, pages 987–992. Association for Computing Machinery, 2016. cited By 40; Conference of 24th ACM SIGSOFT International Symposium on Foundations of Software Engineering, FSE 2016; Conference Date: 13 November 2016 Through 18 November 2016; Conference Code:124602.
[ZPG <sup>+</sup> 15]	Yury Zhauniarovich, Anton Philippov, Olga Gadyatskaya, Bruno Crispo, and Fabio Massacci. Towards black box testing of android apps. pages 501–510. Institute of Electrical and Electronics Engineers Inc., 2015. cited By 22; Conference of 10th International Conference on Availability, Reliability and Security, ARES 2015; Conference Date: 24 August 2015 Through 27 August 2015; Conference Code:118455.
[ZR17]	Hailong Zhang and Atañas Rountev. Analysis and testing of notifications in android wear applications. pages 347–357. Institute of Electrical and Electronics Engineers Inc., 2017. cited By 18; Conference of 39th IEEE/ACM International Conference on Software Engineering, ICSE 2017; Conference Date: 20 May 2017 Through 28 May 2017; Conference Code:129335.
[ZW12]	Bin Zhu and Anbao Wang. Functional and user interface model for generating test cases. pages 605–610, Shanghai, 2012. cited By 0;

Conference of 2012 IEEE/ACIS 11th International Conference on Computer and Information Science, ICIS 2012; Conference Date: 30 May 2012 Through 1 June 2012; Conference Code:91164. [ZWR16] Hailong Zhang, Haowei Wu, and Atañas Rountev. Automated test generation for detection of leaks in android applications. pages 64-70. Association for Computing Machinery, Inc, 2016. cited By 25; Conference of 11th International Workshop on Automation of Software Test, AST 2016; Conference Date: 14 May 2016 Through 15 May 2016; Conference Code:121626. [ZYZS15] Haowen Zhu, Xiaojun Ye, Xiaojun Zhang, and Ke Shen. A contextaware approach for dynamic gui testing of android applications. volume 2, pages 248-253. IEEE Computer Society, 2015. cited By 14; Conference of 39th IEEE Annual Computer Software and Applications Conference, COMPSAC 2015; Conference Date: 1 July 2015 Through 5 July 2015; Conference Code:118205. [ZZLG08] Xiaochun Zhu, Bo Zhou, Juefeng Li, and Qiu Gao. A test automation solution on gui functional test. pages 1413-1418, Daejeon, 2008. cited By 8; Conference of IEEE INDIN 2008: 6th IEEE International Conference on Industrial Informatics; Conference Date: 13 July 2008 Through 16 July 2008; Conference Code:73833. [11]Mehmet Erdal Özkinaci and Aysu Betin Can. Detecting execution and html errors in asp .net web applications. volume 2, pages 172–178, Seville, 2011. cited By 2; Conference of 6th International Conference on Software and Database Technologies, ICSOFT 2011 ; Conference Date: 18 July 2011 Through 21 July 2011; Conference Code:86389. [M14]Iulia Ștefan, Ioan Ivan, and Liviu Cristian Míclea. Assisted test case design using contextual information by dom exploration. Cluj-Napoca, 2014. IEEE Computer Society. cited By 2; Conference of 2014 19th IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2014; Conference Date: 22 May 2014 Through 24 May 2014; Conference Code:106774. [12]Iulia Ștefan and Liviu Cristian Míclea. The usage of contextual information to develop data test vectors. pages 302-306, Cluj-Napoca, 2012. cited By 1; Conference of 2012 18th IEEE International Conference on Automation, Quality and Testing, Robotics, AQTR 2012; Conference Date: 24 May 2012 Through 27 May 2012; Conference Code:91781.