Software Engineering Seminar

Testing of Mobile Apps

Description

As mobile applications (apps) have become popular, several automated testing approaches for apps have been proposed [1, 2]. One particular direction is search-based/evolutionary testing of apps.

The student should explore and discuss the current state of the art in search-based/evolutionary testing of apps by investigating, discussing, and comparing different approaches.

References

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[2] Mario Linares-Vásquez, Kevin Moran, and Denys Poshyvanyk. Continuous, evolutionary and large-scale: A new perspective for automated mobile app testing. In *2017 IEEE International Conference on Software Maintenance and Evolution (ICSME)*, pages 399–410, Sep. 2017.

[3] Riyadh Mahmood, Nariman Mirzaei, and Sam Malek. Evodroid: Segmented evolutionary testing of android apps. In *Proceedings of the 22Nd ACM SIGSOFT International Symposium on Foundations of Software Engineering*, FSE 2014, pages 599–609, New York, NY, USA, 2014. ACM.

[4] Ke Mao, Mark Harman, and Yue Jia. Sapienz: Multi-objective automated testing for android applications. In *Proceedings of the 25th International Symposium on Software Testing and Analysis*, ISSTA 2016, pages 94–105, New York, NY, USA, 2016. ACM.

[5] Priyam Patel, Gokul Srinivasan, Sydur Rahaman, and Iulian Neamtiu. On the effectiveness of random testing for android: Or how i learned to stop worrying and love the monkey. In *Proceedings of the 13th International Workshop on Automation of Software Test*, AST '18, pages 34–37, New York, NY, USA, 2018. ACM.

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