Software Engineering Seminar

Automated Crash Reproduction

Description

Software failures are typically reported to developers who then try to reproduce the failure to find the root cause and subsequently to verify whether their changes actually fix the problem. Manually reproducing a bug can be a costly and complex task so that techniques have been proposed that support creating high-quality bug reports [1] or automated the crash reproduction [3, 4, 5], for instance, given a stack trace and a faulty software a test case is created that reproduces the reported crash (stack trace) in the software.

The student should explore and discuss the current state of the art in automated crash reproduction by investigating, discussing, and comparing such automated techniques.

References


Contacts

Thomas Vogel (thomas.vogel@informatik.hu-berlin.de)
Software Engineering Group
Institut für Informatik
Humboldt-Universität zu Berlin