



Software Engineering Seminar

Automated Repair of Conditional Statements

– NOPOL –

Description

Since automated repair of bugs is a very hard and complex task, it makes sense to simplify the problem by concentrating on a specific class of bugs instead of bugs in general. One promising approach was done with NOPOL, which focuses on the repair of buggy conditional statements in a program.

The goal of this topic is to examine the tool NOPOL and its underlying mechanics.

References

- [1] Favio Demarco, Jifeng Xuan, Daniel Le Berre, and Martin Monperrus. Automatic repair of buggy if conditions and missing preconditions with SMT. *CoRR*, abs/1404.3186, 2014.
- [2] J. Xuan, M. Martinez, F. DeMarco, M. Clément, S. L. Marcote, T. Durieux, D. Le Berre, and M. Monperrus. Nopol: Automatic repair of conditional statement bugs in java programs. *IEEE Transactions on Software Engineering*, 43(1):34–55, Jan 2017.

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