

*Take nothing on its looks; take everything on evidence.
There's no better rule.*

Charles Dickens

Program Repair via Semantic Analysis

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August 28th, 2013

Program repair via semantic Analysis.

Bug fixing continues to be a mostly manual, time consuming, and therefore expensive activity in software development.

Hoang Duong Thien Nguyen et al.

Simplified Java clone of “SemFix: Program Repair via Semantic Analysis” Hoang Duong Thien Nguyen, Dawei Qi, Abhik Roychoudhury, and Satish Chandra

State of the art



SemFix: Program Repair via Semantic Analysis

Hoang Duong Thien Nguyen, Dawei Qi, Abhik Roychoudhury, and
Satish Chandra

GenProg: A Generic Method for Automatic Software Repair

Claire Le Goues, ThanhVu Nguyen, Stephanie Forrest, Westley Weimer

State of the art

ClearView, AutoFix-E, Gopinath et al, Pachika.

Problems

Unwillingness to share code.

Limitations

Resources (time, code monkeys, knowledge, tools, etc.).

Contributions

Seeded and wild bugs.

Generated patches vs. reality.

Conclusion

Can't and shouldn't.

