2019 IEEE/ACM 41st International Conference on Software Engineering: Companion Proceedings (ICSE-Companion)

Toward Detection and Characterization of Variability Bugs in Configurable C Software: An Empirical Study

Austin Mordahl

Department of Computer Science University of Texas at Dallas Richardson, TX, USA

Email: austin.mordahl@utdallas.edu

Abstract—Variability in C software is a useful tool, but critical bugs that only exist in certain configurations are easily missed by conventional debugging techniques. Even with a small number

they are already familiar with to find variability bugs as part of the quality assurance process. Furthermore, studying new variability bugs would inform the design of variability-aware