

Miceli, Thierry, Sahraoui, Houari A., Godin, Robert. « A Metric Based Technique for Design Flaws Detection And Correction » In *Proceedings of 14th IEEE Automated Software Engineering Conference (ASE'99)*. Cocoa Beach, FA, USA. October 12-15, 1999.

Abstract

During the evolution of object oriented systems, the preservation of correct design should be a permanent quest. However, for systems involving a large number of classes and subject to frequent modifications, detection and correction of design flaws may be a complex and resource consuming task. Automating the detection and correction of design flaws is a good solution to this problem. Various works propose transformations that improve the quality of an OO system while preserving its behavior. In this paper we propose a technique for automatically detecting situations where a particular transformation can be applied to improve the quality of a system. The detection process is based on analyzing the impact of various transformations on software metrics using quality estimation models.