

Can Cohesion Predict Fault Density?

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Summary

Cohesion is an internal software attribute which depicts how well the components of a software module are connected. It is thought of as having effect on the quality of the software system. This paper presents the results of an empirical investigation of whether cohesion of object-oriented systems plays a role on software reliability. The paper presents a study of the correlation between cohesion measures and the number of defects in software systems, using seven open source projects.

References:

1. ADAM A, 2004, THESIS KING FAHD U P
2. AMAN H, 2002, KNOWLEDGE BASED SOFT, P102
3. BANSIYA J, 1999, J OBJECT-ORIENT PROG, V11, P47
4. BIEMAN J, 1995, P ACM S SOFTW REUS S, P259
5. BRIAND L, 1994, 3301 CSTR U MAR COLL
6. BRIAND LC, 2002, IEEE T SOFTWARE ENG, V28, P706
7. CHAE HS, 2000, SOFTWARE PRACT EXPER, V30, P1405
8. CHIDAMBER S, 1994, IEEE T SOFTWARE ENG, V20
9. CHIDAMBER SR, 1991, SIGPLAN NOTICES, V26, P197
10. ELEMAM K, 2001, J SYST SOFTWARE, V56, P63
11. FENTON EN, 1997, SOFTWARE METRICS RIG
12. HENDERSONSELLERS B, 1996, OBJECT ORIENTED SYST, V3, P143
13. HITZ M, 1996, IEEE T SOFTWARE ENG, V22
14. JARALLAH A, 2001, PRINCIPLE METRICS CO
15. KHAN S, 2001, DESIGN LEVEL COUPLIN

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