

Study	Confounding Variable(s)	Data Set	Analysis	Results
Basili et al, 1996	None factored in	8 student projects written in C++	Univariate linear regression. Multivariate logistic regression	Finds that LCOM is not a significant predictor of fault-proneness while the remainder of the CK metrics are.
Tang et al., 1999	None factored in	3 small/medium commercial systems written in C++	Logistic regression	RFC and WMC strong predictors for fault-proneness
Emam et al., 1999	Class size (LOC)	1 medium-sized commercial project	Logistic regression	After controlling for size, only CBO was an indicator of fault-proneness
Cartwright and Shepperd, 2000	None factored in	One large commercial project	Linear regression	Found the inheriting classes were more defect prone (identified as classes having a DIT or NOC > 0)
Subramanyam and Krishnan, 2003	None factored in	1 large commercial project written in C++ and Java	Linear regression	CBO, DIT, WMC predictive of fault-proneness
Ferenc et al., 2005	None factored in	1 large C++ FLOSS project	Linear regression, decision trees and neural networks.	CBO and LOC predictive of fault-proneness.
Xu et al., 2008	Class size (LOC)	1 medium-sized government project written in C++	Neural networks	CBO, RFC and WMC are reliable metrics for defect estimation finding that overall
Malhotra and Jain, 2012	None factored in	1 medium/large-sized FLOSS project written in Java	Logistic regression and machine learning techniques	Machine learning models comparable in performance to linear models. Found that CBO, LCOM, RFC and WMC not to be significant predictors of fault-proneness. The rest of the CK metrics were indicators.
Okutan and Yıldız, 2014	None factored in	9 open-source Java projects.	Bayesian networks	RFC is the most reliable predictor of fault-proneness. LCOM and WMC are less effective while NOC and DIT have limited effect.
Song et al, 2018	None factored in	106 publicly available data sets.	Machine learning algorithms	CK metrics, used alongside network and process metrics, were found to enable defect prediction.