

Table 1: Cross-version classification results when changing the classification threshold *from the third quantile to median*. The table shows the precision, recall, % of overlapping files that are identified by our topic-based approach and LM, and the defect density of the identified files.

Predicted System	Precision	Recall	% overlapping files	Defect Density (Defect/KLOC)	
				Topic-based	LM
Mylyn 2.0	0.98	0.95	0%	7.33	5.76
Mylyn 3.0	0.85	0.85	0%	3.28	3.10
Eclipse 2.1	0.85	0.74	2.1%	2.63	1.01
Eclipse 3.0	0.73	0.75	3.5%	3.50	1.86
NetBeans 5.0	0.73	0.68	5.5%	0.09	0.23
NetBeans 5.5.1	0.79	0.76	7.6%	0.32	0.45

Table 2: Cross-version classification results when changing the classification threshold *from the third quantile to the 90 percentile*. The table shows the precision, recall, % of overlapping files that are identified by our topic-based approach and LM, and the defect density of the identified files.

Predicted System	Precision	Recall	% overlapping files	Defect Density (Defect/KLOC)	
				Topic-based	LM
Mylyn 2.0	0.67	0.78	0%	0	5.76
Mylyn 3.0	0.76	0.72	0%	4.33	1.02
Eclipse 2.1	0.79	0.79	1.6%	5.33	1.11
Eclipse 3.0	0.63	0.84	1.5%	7.79	1.88
NetBeans 5.0	0.55	0.67	0.7%	0.60	0.25
NetBeans 5.5.1	0.60	1.00	7.6%	0.71	0.47