Linear Regression

Model Fit Measures

Model	R	R²	Adjusted R²	AIC	BIC	RMSE	Overall Model Test			
							F	df1	df2	p
1	0.953	0.908	0.800	-84.0	-45.1	0.0477	8.45	21	18	< .001

Model Coefficients - R1

Predictor	Estimate	SE	t	p
Intercept	0.91918	0.16106	5.70703	< .001
avg-soc	6.15e-7	7.50e-6	0.08206	0.936
avg-revisions	-0.00701	0.01963	-0.35706	0.725
avg-refactoring-main-dev-ownership	-0.04142	0.20099	-0.20609	0.839
avg-main-dev-ownership	0.12267	0.21654	0.56649	0.578
avg-fragmentation-total-revs	NaN	NaN	NaN	NaN
avg-fragmentation-fractal-value	0.37781	0.26892	1.40494	0.177
avg-entity-churn-commits	NaN	NaN	NaN	NaN
avg-entity-churn-deleted	-1.49e−4	0.00149	-0.10012	0.921
avg-entity-churn-added	-0.00125	0.00117	-1.06815	0.300
avg-author-churn-commits	-0.00114	0.00145	-0.78962	0.440
avg-author-churn-deleted	-1.90e−5	2.26e-5	-0.84412	0.410
avg-author-churn-added	1.23e-5	1.19e-5	1.03320	0.315
avg2-ownership-deleted	7.20e-4	0.00238	0.30240	0.766
avg2-ownership-added	0.00103	0.00189	0.54664	0.591
avg2-total-revs-effort	NaN	NaN	NaN	NaN
avg2-author-revs-effort	0.01392	0.03848	0.36173	0.722
avg2-strength-communication	-2.84e−4	0.00217	-0.13094	0.897
avg2-degree-coupling	-3.19e−6	0.00187	-0.00171	0.999
avg-age-months	-1.88e−4	5.62e-4	-0.33504	0.741
max-age-months	1.92e-4	4.67e-4	0.41093	0.686
number-of-authors	-3.45e−6	1.11e-4	-0.03108	0.976
number-of-entities-changed	-2.21e−6	2.52e-6	-0.87917	0.391
number-of-entities	2.03e-6	5.94e-6	0.34226	0.736
number-of-commits	-2.53e−6	1.01e-5	-0.25067	0.805

Note. Linear model contains aliased coefficients (singular fit)

Assumption Checks

Normality Tests

	Statistic	p
Shapiro-Wilk	0.955	0.117
Kolmogorov-Smirnov	0.135	0.420
Anderson-Darling	0.636	0.091

Note. Additional results provided by *moretests*

Heteroskedasticity Tests

	Statistic	p
Breusch-Pagan	16.2	0.756
Goldfeld-Quandt	NaN	
Harrison-McCabe	NaN	

Note. Additional results provided by *moretests*

Durbin–Watson Test for Autocorrelation

Autocorrelation	DW Statistic	p
0.344	1.26	0.018