

Technical Report

Xunhui Zhang, Yue Yu, Tao Wang, Ayushi Rastogi, Huaimin Wang

1. Factor correlation heatmaps

The heatmap of correlation between factors can be seen in Figure 1, 2 and 3, which represents the correlation between continuous factors, the correlation between categorical factors and the correlation between continuous and categorical factors.

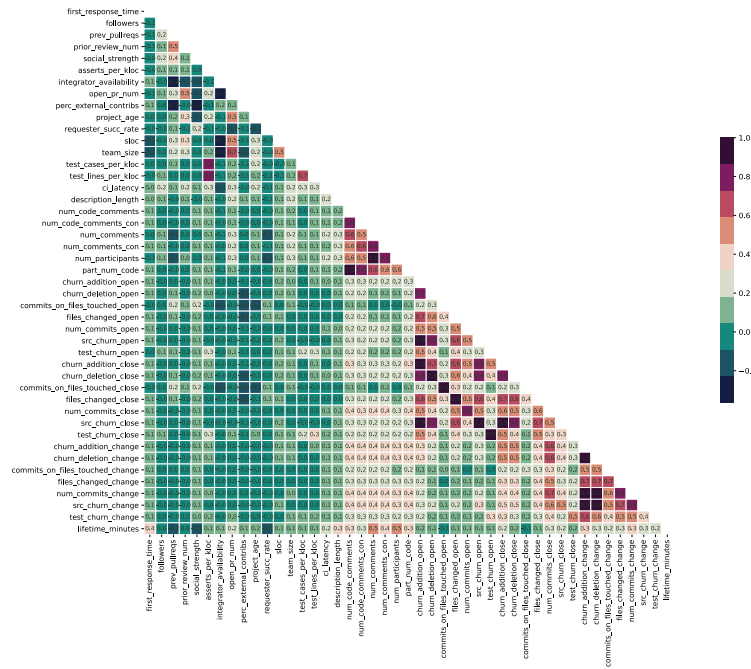
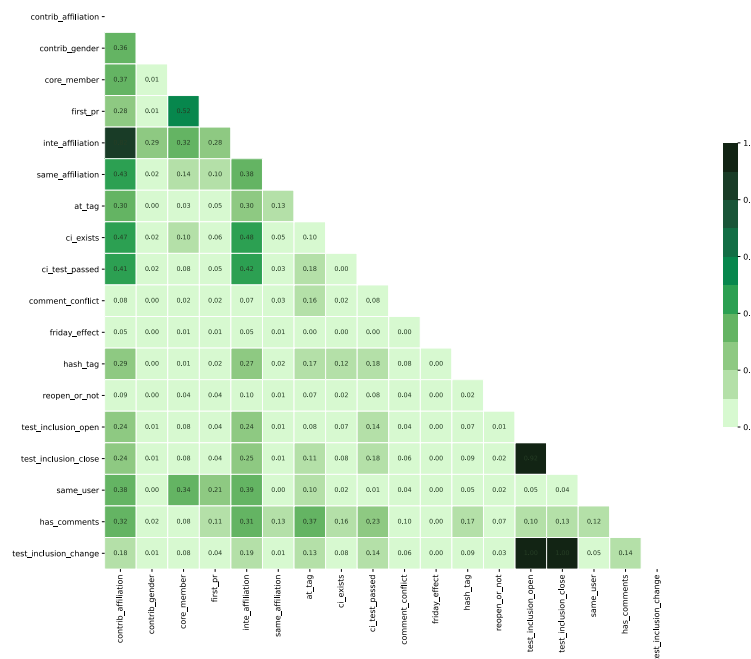


Fig 1. Heatmap of Spearman correlation coefficients



contrib_affiliation	-0.04	0.09	0.3	0.14	0.17	0.28	0.04	0.34	0.12	0.21	0.08	0.19	0.24	0.27	0.25	0.00	0.05	0.02	0.02	0.06	0.04	0.13	0.05	0.01	0.01	0.17	0.03	0.04	0.01	0.02	0.01	0.00	0.19	0.03	0.04	0.00	0.02	0.00	0.00	0.07	0.01	0.01	0.00	0.00	0.03
contrib_gender	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
core_member	-0.01	0.00	0.06	0.00	0.17	0.00	0.02	0.00	0.28	0.00	0.27	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
first_pr	-0.01	0.00	0.03	0.00	0.10	0.00	0.01	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
inte_affiliation	-0.04	0.06	0.24	0.34	0.16	0.35	0.06	0.21	0.27	0.08	0.15	0.26	0.32	0.33	0.00	0.00	0.03	0.02	0.02	0.04	0.04	0.11	0.05	0.01	0.00	0.18	0.03	0.04	0.00	0.02	0.00	0.00	0.19	0.03	0.04	0.00	0.02	0.00	0.00	0.08	0.00	0.02	0.01	0.05	
same_affiliation	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
at_tag	-0.00	-0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.01	0.05	0.00	0.00	0.00	0.06	0.05	0.14	0.14	0.31	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
ci_exists	-0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
ci_test_passed	-0.00	-0.00	0.00	0.00	0.01	0.01	0.04	0.00	0.00	0.03	0.00	0.00	0.04	0.06	0.00	0.00	0.00	0.02	0.02	0.03	0.04	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
comment_conflict	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.05	0.05	0.04	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00		
friday_effect	-0.00	0.00	0.00	0.00	0.00																																								

Strong correlation network

[illegible]

4b. At pull request close time