Technical Report

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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.

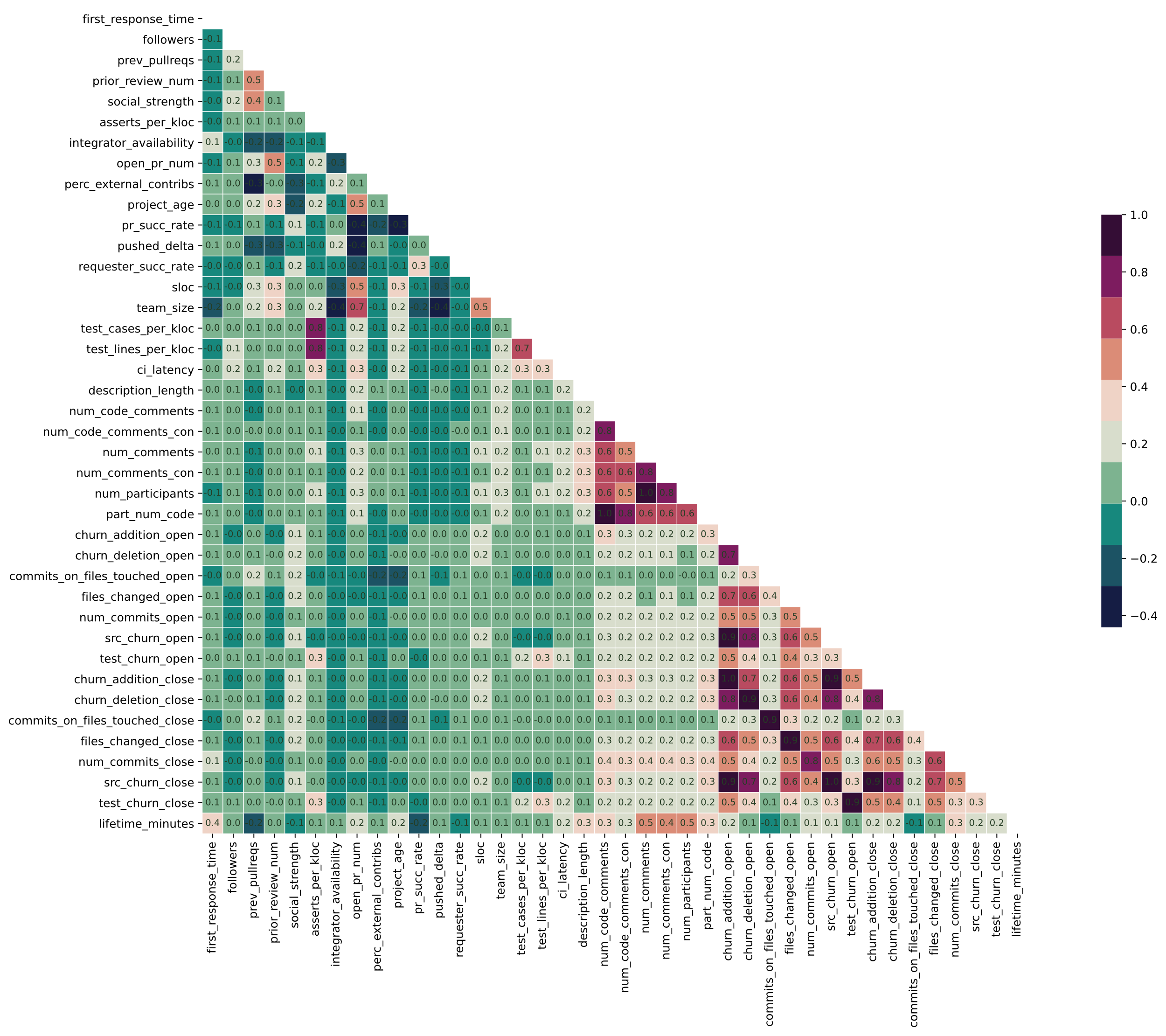


Fig 1. Heatmap of Spearman correlation coefficients

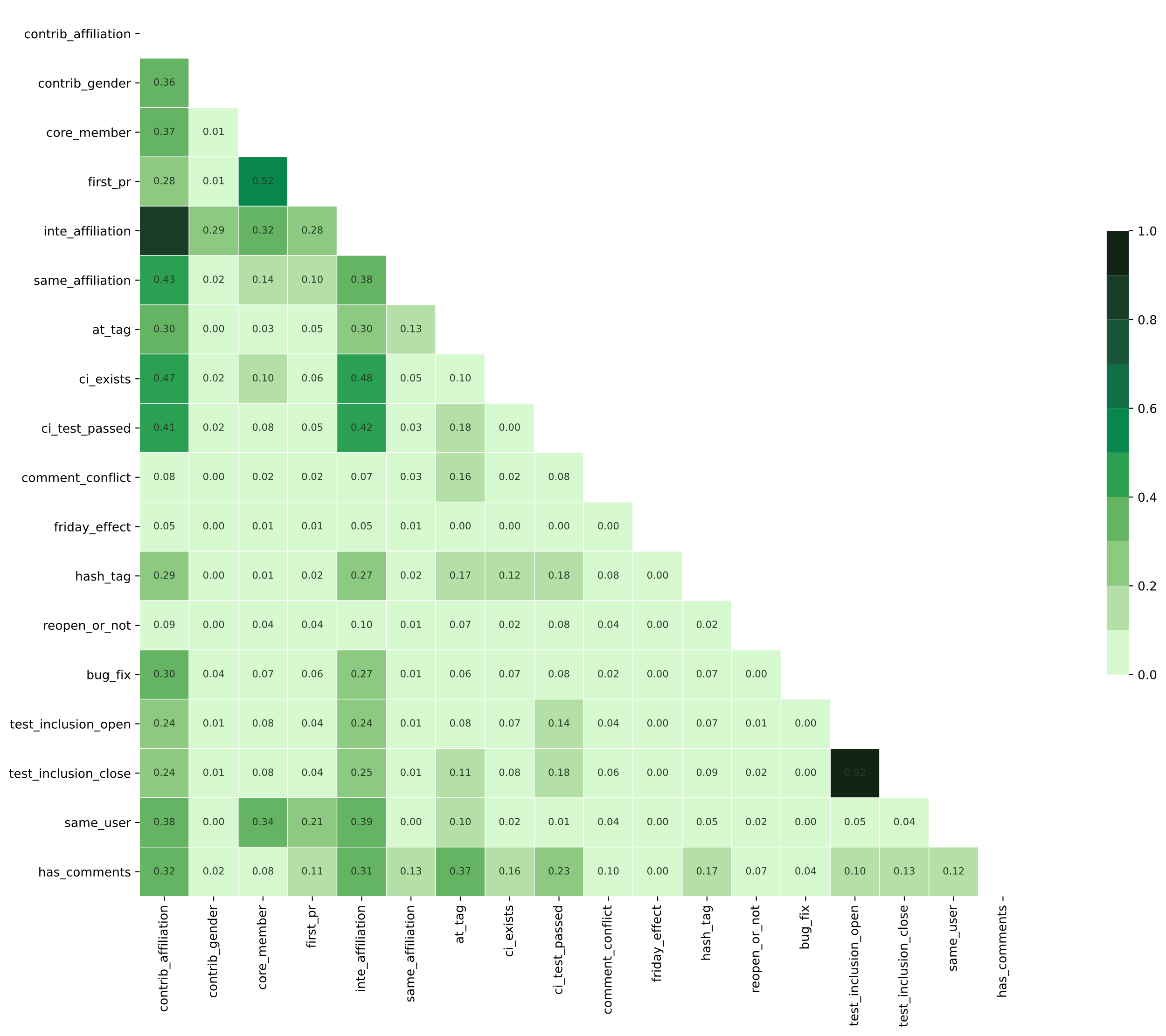


Fig 2. Heatmap of Cramer’s V value

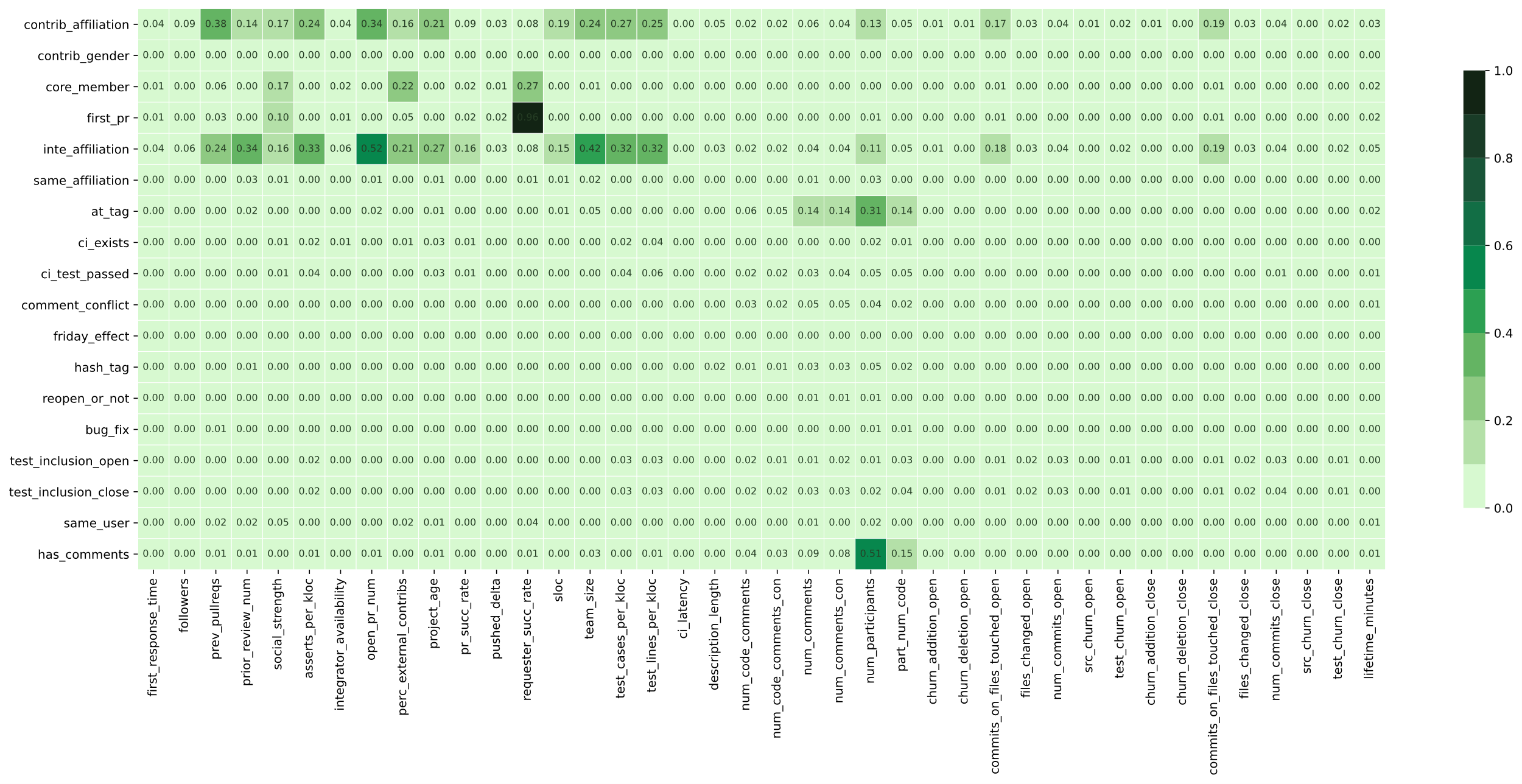


Fig 3. Heatmap of partial Eta-square value

1. **Strong correlation network**

Figure 4 presents the correlation network among strongly correlated factors, where node size and text size are positively correlated with node’s degree. So does the node color depth.

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|  |  |
| 4a. At pull request open time | 4b. At pull request close time |

Fig 4. Correlation network of strongly correlated factors