

Analysis of Collaboration Networks in Open Source Project's Issue Trackers

Summary

We have an existing framework for crawling data from Github.com issue trackers. Objective of this thesis is to extend the framework to also crawl Jira issue trackers and then perform an analysis of the evolution of selected metrics from the field of social network analysis based on a representative set of Github.com and Apache projects. The thesis presents clusters of projects based on their metric results and identifies patterns of the metrics' evolution.

Work Results

- Literature review
 - Issue tracker analysis in open source
 - Social network analysis
 - Open source project evolution
- Research results
 - Derived social networks from issue trackers of Github.com and Apache open source projects
 - Selected and calculated relevant SNA metrics for all issue trackers over time
 - Evaluated metrics results and deduced conclusions about collaboration behaviour in open source
 - Investigated evolutionary patterns in metrics over time (utilizing identified clusters or additional project meta data)

Supervisor

Maximilian Capraro, maximilian.capraro@fau.de,

Prof. Dr. Dirk Riehle, dirk.riehle@fau.de

Open Source Research Group

Computer Science Department

Friedrich-Alexander University

More information: <http://osr.cs.fau.de/theses/resources/>