

SECTION 5.2

NETWORK ANALYSIS

SOCIAL NETWORK ANALYSIS

TRACKING COMMITTERS
THROUGHOUT THE FORGE

PROJECT NETWORK ANALYSIS

MITIGATING THE IMPACT
OF FORKING

- Detail the twin threats to validity from forking and changing committer IDs on network analysis
- Document solutions to mitigate these threats

SECTION 5.3

EXPLORATORY DATA ANALYSIS

COMMITTER BEHAVIOUR ANALYSIS

- Analyse forge for committer trends

SECTION 5.4

SAMPLING

INTRAPROJECT SAMPLING

INTERPROJECT SAMPLING

- Network analysis identifying 'stable project pairs'

SECTION 5.5

INTRAPROJECT STABILITY ANALYSIS

INTRAPROJECT TEAM STABILITY



STRUCTURAL METRICS

- Formulate a measure of intraproject team stability
- Calculate team stability for each project
- Analyse impact of intraproject team stability on structural metrics

SECTION 5.6

INTERPROJECT STABILITY ANALYSIS

INTERPROJECT TEAM STABILITY



STRUCTURAL METRICS

- Formulate a categorical measure of interproject team stability.
- Analyse impact of interproject team stability on structural metrics

SECTION 5.7

PROJECT-LEVEL ANALYSIS

PROJECT SELECTION

PROJECT QUALITATIVE AND
QUANTITATIVE ANALYSIS

MODEL VALIDATION

- Visualise project sample. Selection of projects for further study.
- Quantitative analysis of metric values and model parameters.
- Qualitative analysis of internal structural attributes of code