

Data Collection
Mailing Lists
Bug Tracking Repositories
Codebase

Data Cleaning and Wrangling
12 equioespaced directed graphs
for each project

Morkov Chain Monte Carlo Estimation
Rate of Change
Parameter Estimates with p-value and
s.e.

Statistical Model
Test of Goodness of Fit
Relative Importance of Effects

Multi-Parameter T-test and MANOVA
Test of Goodness of Fit
Relative Importance of Effects

Results
Reresented Collaboration with Longitudinal Change
Modeled change and Rate of change statistically
Expressed underlying properties/values of commu-
nity Behavior as model effects and their significance
and relative importance
Good starting point for gaining an understanding of
longitudinal change of underlying properties of an
open source project community