Metrics for Classification of System Evolution Steps

Background

- development of cyber-physical systems consists of many different roles & domains
- evolution → set of changes betw. versions

- changes between versions can be tracked (example in software engineering: Git)
- Analysis of evolution enables insights (e.g., performance, market indicators, etc.)

Challenges

- automated analysis of evolution steps
- classification of evolution steps (example: semantical or syntactical)
- application in other domains

Work Plan

1. Research: classification and metrics
2. Concept: metric to classify evolution steps
3. Realisation: Implementation, Case Study
4. Evaluation: Feasibility