

5.2 Predictive Analytics

challenges in building software to satisfy / predict expected quality factors.

(? broaden to include how to deal with massive data: where stored, how accessed, redundancy / consistency / replication avoid or exploit, what data is static vs dynamic / diffs in sensed env from history-based model)

- correlating product variability to effects on behavior / qualities as a basis for comparing alternative solutions (model adaptability based on predicate logic: commonality (universal quantifier / predicate constant), variability (existential quantifiers / predicate variable)?)
- behavior / properties of artificial-natural systems and ecosystem, with and without induced effects of injected products
- simulating natural and artificial systems, incl users acting in a business process {ability to inject faults, enable observability / traceability of non-observable behavior}
- root cause analysis: what could change that would invalidate (or require changes in) inferences based on historic data {relation to diagnostics / prognostics for hdw?}