Incremental Analysis with Strongly Connected Components

Description

Re-analyzing the non functional requirements are needed when the software evolves. Probabilistic models are widely used models to verify the non functional requirements such as reliability and performance. Recently, incremental analysis techniques are increasing to avoid the re-analysis from the scratch. One of these recent work is dividing and grouping the Markov models as probabilistic models into strongly connected component graphs.

This seminar topic specifically understands and evaluates the aforementioned approach. In other words, it asks the questions? What kind of changes can be captured in the model? How is the performance evaluation? How local properties are used during verifying global properties? How much is accurate with the result coming from the re-analysis of the whole model.

P.S. Please define a literature path from RoR (references of references), ask for help and cooperate with me to read some papers simultaneously for discussions.

References


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