
Automatic Support for Requirements Validation

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Résumé

The automotive industry is currently going through rapid changes from a mechanical industry to one driven by innovation in electronics and embedded software. This significant change creates also significant challenges to the industry. One of the most important is the ability to create safe vehicles, emphasizing the importance of safety by design.

In this context, we propose a framework based on a correction-by-design approach the industry-wide development of reliable systems. The tool aims to integrate formal analysis and verification of requirements at the earliest stages of the development life cycle. This work introduces a systematic process for the unambiguous specification of systems and the guided derivation of models that are evidences that the requirement specifications are realizable. This rigorous design is carried out by incremental model building using model-checking tool.

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