MASTER'S THESIS

Verification tools for communication protocol design

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Abstract

We describe the work for developing a verification tool for communication protocol design. In our project, the communication protocol is modeled as CSP processes and the design is captured by the system in a graphical notation of CSP. The CSP description will be reasoned by the theorem prover HOL90. In this thesis, we explore the way to reason the CSP expressions with the theorem prover and show how the reasoning can be performed in an automated fashion.

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