

Verification of Cyber-Physical Systems in Maude

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Cyber-Physical Systems, shortly CPS, are networks of controllers that interact or control physical environments. Some examples of CPS are cars, aircrafts, railway systems, smart traffic systems, and the like. It is very important, that CPS behaves correctly and securely, and only formal verification of the components can provide the guarantees. Lingua Franca (LF) is a coordination framework for designing and verification of CPS components.

Maude is a rewriting logic based programming language with strong formal verification capabilities. In this talk we will speak about programming LF models in Maude and about their formal verification.

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