

Modelling and Verification of Discrete and Continuous Systems in the Railway Domain

Monika Seisenberger¹[0000-0002-2226-386X]

Swansea University, Wales, UK, m.seisenberger@swansea.ac.uk
www.swansea.ac.uk/staff/m.seisenberger

Abstract. We present various problems in Railway verification and show how they lead to a SAT/SMT or modellchecking problem. We then compare the different modelling approaches, used for these discrete and hybrid systems, discuss the tradeoff between precise computation and efficiency, and present ongoing work with regard to independently checking the verification results. We conclude with a number of current challenges. This is joint work with the Swansea Railway Verification Group and our Industrial collaborator Siemens Mobility, Chippenham.

References

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