Developing and Integrating Petri net tools - an Experience Report (Invited Talk)

Karsten Wolf
Universität Rostock
Institut für Informatik

Academic tools are increasingly important outcomes of academic research. They can be used for proving applicability of theoretical results, for linking theory and practice, and they can serve as well assessable deliverables of research projects. The Petri net group in Rostock has a long tradition in developing Petri net related academic tools. Today, about 20 tools are contributed, developed by teams working in different cities and countries. Our tools have been integrated into several general verification frameworks.

In the talk, we would like to give an overview on tool development in Rostock and discuss our general tool philosophy, including interoperability and integration. We will also share our experience concerning general issues in academic tool development as opposed to industrial software engineering. Our examples will include recent tools such as the Anica tool that checks an information flow security property on Petri nets.