Proseminar Real Time Systems

Introductory Meeting

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Theory of Hybrid Systems
Informatik 2

SS 10

Content

Contents (rough)

- Formal modeling of real world scenarios
- Properties for such systems
- Automatic error analysis of systems

Goals of this proseminar

- Independent elaboration of a topic
- Structured scientific working
- Development of a short paper
- A good talk addressing the other students
- Literature research
- LaTeX skills

Paper and Talk

Paper

- 6 pages
- Font size 12pt
- Text begins on titlepage
- No index of contents
- Spell checker
- Paper has to be written in LaTeX

Talk

- 20 minutes
- Talk is for other students
- LaTeX-Beamer

Important Dates

04.05.2010	Contact supervisor
25.05.2010	Structure of paper
15.06.2010	Paper ready
29.06.2010	Final paper
13.07.2010	Slides ready
20.07.2010	Final slides
tba	Presentation

Topics

1. Classification of Hybrid Systems (Paul Zakalek, Betreuung: Xin Shen)
2. Geometric Representation of State Sets (Matthias Volk, Betreuung: Xin Shen)
3. Modeling of Examples (Models and Properties) for Hybrid Systems (Jens Katelaan, Betreuung: Ulrich Loup)
4. BMC-based Solving (Johannes Krude, Betreuung: Ulrich Loup)
5. Introduction to Probabilistic Systems (Benjamin Meister, Betreuung: Nils Jansen)
6. Tools for Probabilistic Model Checking (Joern Lenoch, Betreuung: Nils Jansen)
7. Real Time Logics (Sebastian Junges, Betreuung: Erika Ábrahám)
8. Tool: Real Time Mod (Arne Doering, Betreuung: Erika Ábrahám)
9. Tools: Zeitautomaten (Karolin Koehler, Betreuung: Nils Jansen)