Recent Advances in Model Checking (IN0012, IN2106)

Practical course

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Context



- Quantitative (e.g. probabilistic), more agents, several competing properties,...
- Well-established industrial method & recent research

Content

- 1. Understand the ideas of a recent scientific publication.
- 2. Implement them.
- 3. Test them.

Different focus, depending on paper:

Theory: Understanding and extracting the ideas

Implementation: Technically involved Evaluation: Comparing multiple ideas

Publications (and hence focus) will be selected after a short introductory lecture phase.

Structure

~4 weeks: Introductory lectures about

theory common to all papers and relevant software to build on

~4 weeks: Understanding paper, developing prototype Groups of up to 3 people.

10%

Midterm presentation: Convince us that you are on the right track

50%

~4 weeks: Finishing implementation, writing documentation

Endterm presentation: Demonstrate what you achieved

+interview

30%

What do we expect?

- Working code that we can execute on several examples and reproduce your results.
- Documentation that allows us to find and understand the most important methods of your code.
- Endterm presentation to demonstrate that you solved the problem.
- Midterm presentation to demonstrate that you are on the right track.
 E.g. by showing understanding and identifying missing parts; unit tests for existing code; and dummy methods for missing parts.

More details follow in the actual course.

Which questions remain unanswered?

What next?

To be preferred in the matching, send a mail with your name and MatrNr to:

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