

Modeling and Solving in Answer Set Programming

A Tutorial at KR'12

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<http://www.cs.uni-potsdam.de/~torsten/kr12tutorial/summary>

Short Description

This short tutorial presents a practical introduction to Answer Set Programming (ASP), aiming at using ASP languages and systems for solving application problems. Starting from the essential formal foundations, it introduces ASP's solving technology, modeling language and methodology, while practically illustrating the overall solving process by examples.

All involved ASP systems are freely available from <http://potassco.sourceforge.net>.

Topics of the Tutorial

1. Motivation
2. Introduction
3. Basic modeling
4. Solving
5. Advanced modeling
6. Systems

Material

- Lecture slides
- IJCAI'11 Lecture slides
- IJCAI'11 Lecture examples (also available as inline attachment to slides)
- ASP Course at University of Potsdam in 2012 (14 lectures; Slides; Handout)
- Potassco user's manual and overview
- This file as PDF or HTML

Contact

Drop me an email at torsten@cs.uni-potsdam.de for any questions.

References

- [1] C. Baral. *Knowledge Representation, Reasoning and Declarative Problem Solving*. Cambridge University Press, 2003.
- [2] M. Gebser, B. Kaufmann, A. Neumann, and T. Schaub. Conflict-driven answer set solving. In M. Veloso, editor, *Proceedings of the Twentieth International Joint Conference on Artificial Intelligence (IJCAI'07)*, pages 386–392. AAAI Press/The MIT Press, 2007.