CS 395T, Spring 2005
Answer Set Programming

Course Description

Unique Number: 53122.

Instructor: Vladimir Lifschitz (`vl@cs.utexas.edu`).

Time and Place: TTh 11-12:30, TAY 3.144.

Office Hours: TTh 1–2 and by appointment, TAY 3.150B.

Answer set programming (ASP) is a form of declarative programming oriented towards difficult combinatorial search problems. It has been applied, for instance, to plan generation and product configuration problems in artificial intelligence and to graph-theoretic problems arising in VLSI design and in historical linguistics. Syntactically, ASP programs look like Prolog programs, but the computational mechanisms used in ASP are different: they are based on the ideas that have led to the development of fast satisfiability solvers for propositional logic. ASP has emerged from interaction between two lines of research—on the semantics of negation in logic programming and on applications of satisfiability solvers to search problems. It was identified as a new programming paradigm in 1999.

There will be no textbook; the necessary materials will be handed out in class and posted at

`http://www.cs.utexas.edu/users/vl/teaching/asp.html` .

There will be no tests; your grade will be determined by your solutions to homework problems and by class participation.