computer languages

Einladung

zum Informatik-Kolloquium des

AB Programmiersprachen und Übersetzer am

Mittwoch, den 15. Juni 2011, um 15 Uhr c.t.

im Hörsaal EI 9 Hlawka, Elektrotechnik, Gußhausstraße 25-29 (Neubau), Erdgeschoss

Es spricht

Prof. Dr. Neng-Fa Zhou

The City University of New York, NY, USA

über

BPSolver's Winning Solutions to the ASP Competition Problems

In this talk, I'll give an overview of the BPSolver team's solutions in B-Prolog to the benchmark problems used in the third ASP Solver Competition. Except for three problems that required only plain Prolog, all the solutions used either CLP(FD) or tabling. Most of the winning CLP(FD) programs used global constraints such as all_distinct, element, circuit, cumulative, and path_from_to. Mode-directed tabling demonstrated a strong performance in the competition. It not only helped easily solve the path-finding problems such as Airport-Pickup and Hydraulic Planning problems, but also helped provide elegant and efficient dynamic programming solutions to the Sokoban and Hanoi Tower problems which had been considered unsuited for B-Prolog. The participation of B-Prolog in the competition created a great opportunity to directly compare top-down tabled evaluation with bottom-up evaluation of logic programs, and CLP(FD) with SAT-based ASP solvers. In this talk, I'll analyze the competition results from my personal perspective and offer my two cents on possible improvements for both CLP(FD) and SAT-based ASP solvers.

Biography: Neng-Fa Zhou is a professor of Computer Science at the City University of New York. He has been an active researcher in programming language systems for over fifteen years. He has authored over thirty papers on programming language, constraint-solving, graphics, and machine learning systems published in journals (ACM TOPLAS, Journal of Logic Programming, Theory and Practice of Logic Programming, Journal of Functional and Logic Programming, and Software Practice and Experience) and major conferences. His papers on compilation of logic programs, constraint solving, and tabling have received a number of citations. He is the principal designer and implementor of the B-Prolog system, a fast CLP system which has several thousand users world-wide in both academia and industry. He has reviewed articles for all major journals and conferences in his area of research and has served on the program committees of several important conferences including ICLP and PADL. (`http://www.sci.brooklyn.cuny.edu/~zhou`)

Zu diesem Vortrag lädt der *Arbeitsbereich für Programmiersprachen und Übersetzer am Institut für Computersprachen* herzlich ein.
Tee: 14:30 Uhr in der Bibliothek E185.1, Argentinierstr. 8, 4. Stock (Mitte).