

LDTA'07

**Seventh Workshop
on Language Descriptions,
Tools, and Applications**

Braga, Portugal
March 25, 2007

Program

Program Chairs

Anthony Sloane
Adrian Johnstone

Welcome to LDTA '07

The Seventh Workshop on Language Descriptions, Tools, and Applications (LDTA '07) is a satellite event of the European Joint Conferences on Theory and Practice of Software (ETAPS '07) and was held in Braga, Portugal, on March 25, 2007. Previous instances of this workshop have been held as satellite events of ETAPS in Vienna, Austria in 2006, Edinburgh, UK in 2005, Barcelona, Spain in 2004, Warsaw, Poland in 2003, Grenoble, France in 2002, and Genoa, Italy in 2001.

The aim of this one day workshop is to bring together researchers from academia and industry who have an interest in the field of formal language definitions and language technologies. A special emphasis is placed on the development of tools based on formal language definitions.

The program for LDTA '07 consists of an invited talk by Uwe Aßmann, five research papers, three experience reports, and three shorter tool demonstrations. The accepted papers were selected from twenty-five submissions, comprising eighteen research papers, three experience reports and four tool demonstrations. Each submitted paper was reviewed by at least three program committee members with conflicts of interest resolved by non-interested parties. The papers cover a range of topics including program transformation, formal grammars and parsing, attribute grammar systems, and debugging.

We would like to thank the members of the program committee for the careful review of the submitted papers. We also thank the ETAPS organizing committee for handling the local organization of the workshop. We are again very pleased that this workshop is held in cooperation with ACM SIGPLAN and with the publication of these proceedings as a volume in the Electronic Notes in Theoretical Computer Science (ENTCS) by Elsevier.

Anthony Sloane
Sydney, Australia

Adrian Johnstone
London, UK

March, 2007

Program Committee

Judith Bishop, University of Pretoria, South Africa
Claus Brabrand, BRICS, University of Aarhus, Denmark
Nigel Horspool, University of Victoria, Canada
Johan Jeuring, Utrecht University, The Netherlands
Adrian Johnstone, Royal Holloway, University of London, UK (co-chair)
Steven Klusener, Vrije Universiteit, The Netherlands
Kent Lee, Luther College, USA
Brian Malloy, Clemson University, USA
Terence Parr, University of San Francisco, USA
Michael Schwartzbach, BRICS, University of Aarhus, Denmark
Anthony Sloane, Macquarie University, Australia (co-chair)
Jurgen Vinju, CWI, The Netherlands

Organizing Committee

Alcino Cunha, University of Minho, Braga, Portugal
Thomas Noll, RWTH Aachen University, Germany

LDTA '07 Program

Session 1 (09:00-10:30)

Welcome and Introduction

Invited Talk: *Collaboration-Based Composition of Languages*
Uwe Aßmann

Research Talk: *Language Parametric Module Management*
Paul Klint, Taeke Kooiker, Jurgen Vinju

Coffee Break (10:30-11:00)

Session 2 (11:00-12:30)

Research Talk: *Fusing a Transformation Language with an Open Compiler*
Karl Trygve Kalleberg, Eelco Visser

Experience Report: *Implementing a Domain-Specific Language using Stratego/XT*
Leonard Hamay, Shirley Goldrei

Tool Demonstration: *Spoofax: An Interactive Development Environment for Program Transformation with Stratego/XT*
Karl Trygve Kalleberg, Eelco Visser

Lunch (12:30-14:00)

Session 3 (14:00-16:00)

Research Talk: *SPPF-Style Parsing From Earley Recognisers*
Elizabeth Scott

Experience Report: *An Experimental Ambiguity Detection Tool*
Sylvain Schmitz

Research Talk: *Grammar Engineering Support for Precedence Rule Recovery and Compatibility Checking*
Eric Bouwers, Martin Bravenboer, Eelco Visser

Tool Demonstration: *SdfMetz: Extraction of Metrics and Graphs From Syntax Definitions*
Tiago Alves, Joost Visser

Coffee Break (16:00-16:30)

Session 4 (16:30-18:15)

Research Talk: *Silver: an Extensible Attribute Grammar System*
Eric Van Wyk, Derek Bodin, Jimin Gao, Lijesh Krishnan

Experience Report: *Development of a Modelica Compiler using JastAdd*
Johan Åkesson, Torbjörn Ekman, Görel Hedin

Tool Demonstration: *A Domain-Specific Language Debugging Framework Demonstration*
Hui Wu, Jeff Gray, Marjan Mernik

Discussion and Closing