

LoCoCo 2010 – Logics for Component Configuration

Workshop of SAT at FLoC 2010, Edinburgh, Scotland, July 10, 2010

<http://lococo2010.mancoosi.org/>

Second Call for Papers

Scope

Modern software distributions are based on the notion of components, which denote units of independent development and deployment. Components provide the necessary flexibility when organizing a complex software distribution, but also are a challenge when it comes to selecting components from a large repository of possible choices, and configuring these components according to user needs, resource constraints, and interdependencies with other components. Representing and solving configuration problems is a hot topic of great importance for many application domains. Some well-known examples of complex systems of components in the world of Free and Open Source software are the different distributions for GNU/Linux, BSD, or Eclipse plugins.

Understanding and solving these questions is an attractive research topic since the problems to be solved are complex and interesting for researchers working on solving techniques, and on the other hand have the potential of high impact on the way the software we all use everyday is developed and deployed. Not only adequate logical formalisms to represent a configuration problem are required, but also sophisticated reasoning technologies to deal with large amounts of data. Further relevant aspects include diagnosis of failed configuration settings and an intelligent behavior dealing with user preferences.

This workshop will focus on logic-based methods for specifying and solving complex configuration problems for software components. The goal of the workshop is to bring together both researchers and practitioners active in the area of component configuration of software systems, using different modeling and solving techniques, such as constraint and logic programming, description logics, satisfiability and its extensions. The workshop will be an opportunity to discuss common and complementary solutions for solving component configuration.

Topics

Main areas of interest include, but are not restricted to:

- Configuration problems and models: knowledge representation and acquisition, incomplete knowledge, inconsistent knowledge, etc.
- Reasoning methods for solving configuration problems: constraint satisfaction and optimization, SAT solving and extensions, integer programming, local search, symmetry breaking, etc.
- Interactivity: user preferences, machine learning, distributed environments, etc.
- Applications and tools: case studies, current challenges, application reports, etc.

Invited Talk

An invited talk will be given by Carsten Sinz (University of Karlsruhe).

MISC 2010

The first Mancoosi International Solver Competition (MISC) will be held in conjunction with the LoCoCo workshop.

Important Dates

Friday, March 26, 23h59 (UTC-11)	Submission deadline
Friday, April 23	Notification about acceptance
Friday, May 21	Final paper due
Saturday, July 10	Workshop

Submission and Publication

We welcome submissions of various types of papers related to the topics of the workshop:

- *Regular research papers* must be original work, and must not have been previously published, nor be under consideration for publication elsewhere. This category includes system descriptions and tutorial overview papers. System descriptions should come with an URL allowing to access or download the system, with preference to systems that can be downloaded under an open source licence. Presentations of system descriptions at the workshop should include a system demonstration.
- *Presentations* reporting on recent or ongoing work. They are not subject to restriction as for previous, simultaneous, or future publication elsewhere.

The complete proceedings, containing the accepted papers of both categories, will be made freely avail-

able on the web for the workshop. It is planned to provide electronic copies on an USB stick to registered workshop participants. In addition to that, accepted regular research papers will be published in a special issue of Electronic Proceedings in Theoretical Computer Science (EPTCS).

Submitted papers of both categories must not exceed a limit of 10 pages, and have to be prepared in L^AT_EX following the EPTCS formatting instructions. Authors may provide pointers to additional online resources if necessary, and which the reviewers may use to their sole discretion. Authors of accepted papers will keep their copyright, however all papers (of both categories) must carry one of the different brands of the Creative Commons Licence mandated by EPTCS. Authors of accepted papers for the EPTCS proceedings have to grant EPTCS a non-exclusive licence to distribute.

Submissions are handled by easychair at

<http://www.easychair.org/conferences/?conf=lococo2010>

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