

**First International Workshop on  
Analyses of Software Product Lines (ASPL'08)**  
*www.isa.us.es/aspl08*

David Benavides &  
Antonio Ruiz-Cortés  
*Dept. of Computer Languages  
and Systems  
University of Seville  
{benavides, aruiz}@us.es*

Don Batory  
*Dept. of Computer Sciences  
University of Texas at Austin  
batory@cs.utexas.edu*

Patrick Heymans  
*PReCISE Research Centre  
University of Namur  
phe@info.fundp.ac.be*

## 1. Motivation

The automation of software product line (SPL) analyses is of growing interest to both practitioners and researchers. In particular, automated analyses of variability models (like feature or decision models) and languages that foster declarative specifications of programs using those models are now common. We note that many of the problems that SPL engineers face are related to configuration problems that have been addressed by the Artificial Intelligence (AI) community. Indeed, the SPL community is using some of their results, e.g., BDD, CSP and SAT solvers.

This workshop is intended to bring together researchers in SPL and AI in order to review and discuss synergies of the various approaches, and to propose new ideas and results. The two long term objectives are (i) learn from what has been done up to now in AI that is related to automated analyses of SPLs and (ii) creating a community interested in automated analyses of SPL in order to keep SPL tools and research up-to-date with the latest technologies.

## 2. Topics

The main topics of the workshop include, but are not limited to:

- Application of configuration and AI technologies for automated SPL analyses,
- Automated analyses of variability in functional and non-functional/quality requirements,
- Automated consistency checking among SPL artifacts,
- Analyses used in model driven development of SPLs,

- Automated support for SPL evolution,
- Formal methods and semantics of SPL models,
- Surveys and Comparative studies,
- Tool presentations,
- Case studies and proofs of concepts that emphasize analyses (e.g., in Embedded Systems, Information Systems, Service-based Systems...).

## 3. References

- [1] D. Batory, D. Benavides, and A. Ruiz-Cortés. Automated analysis of feature models: Challenges ahead. *Communications of the ACM*, December:45–47, 2006.
- [2] T. Mannisto, T. Soinen, and R. Sulonen. Configurable software product families. In *ECAI 2000 Configuration Workshop*, pages 56–58, Berlin, Germany, 2000. Humboldt University.
- [3] C. Sinz, A. Haag, N. Narodytska, T. Walsh, E. Gelle, M. Sabin, U. Junker, B. O'Sullivan, R. Rabiser, D. Dhungana, P. Grunbacher, K. Lehner, C. Federspiel, and D. Naus. Configuration. *Intelligent Systems*, 22(1):78–90, 2007.

## Acknowledgements

We thank Dr. Barry O'Sullivan, Associate Director of the Cork Constraint Computation Centre (Ireland), for having accepted to open the workshop with a keynote address. We also thank Sergio Segura and Pablo Trinidad, University of Seville, for their help in organizing the workshop. Last but not least, we are grateful to the PC members for their precious and timely reviews.