Motivation and Objective

Software systems are addressing an increasing range of requirements; requirements that in turn evolve over time. If systems are expected to operate successfully under these circumstances, they need to be able to autonomously adapt to the various constraints and situations. Software product line (SPL) techniques can be successfully used to provide such flexibility, but in order to be effective their capabilities need to be fully automatized and be made to work at system runtime. Over the last few years, this branch of software systems has established itself as dynamic software product lines (DSPL), bringing the benefits of a Software Product Line approach to self-* systems.

In a DSPL various software variants are managed, variation points are bound flexibly, but all this is done at runtime, this will typically include the support for fully automatic product derivation. DSPL is strongly related to current research topics like self-managing systems, autonomous and ubiquitous systems, etc. However, it adds product line engineering techniques, methods and processes to the mix as a conceptual basis.

The objective of this workshop is to provide a forum for the exchange of ideas, to establish co-operations, and to bring industry and research together in the field of DSPL.

Topics

While DSPL rests on the stable foundations of classical product line engineering, there is still a lot of work that needs to be done, especially in areas specific to dynamic software product lines. The workshop will solicit papers covering the three broad areas of DPL, namely, dynamic binding in SPL, dynamic variability management, and applications. In particular, the following specific topics will be covered:

- Dynamic binding in SPL:
  - Dynamic library loading
  - Component infrastructure
  - Scripting languages
  - Reflection
  - Dynamic weaving (Aspect-Oriented Programming)
  - Modeling

- Dynamic variability management:
  - Runtime variability identification
  - Runtime variability representation
  - Runtime variability implementation
  - Managing runtime variants
  - Aspect-oriented modeling for runtime variability
  - Self-management

Submission

We solicit short, thought-provoking discussion papers reporting work in progress, industrial experience, etc. Full papers are also eligible and should report mature research results. Papers should be in the ACM SIG Alternative Proceedings Style (A4 paper); for details and templates see: http://www.acm.org/sigs/publications/proceedings-templates

Full papers should not exceed 6 pages and short papers should not exceed 4 pages.

Submissions should be submitted via https://easychair.org/conferences/?conf=dspl2015

For more information about the venue, details on organization, etc. please visit the conference homepage at http://www.lero.ie/dspl2015