



SKY'2014

5th International Workshop on Software Knowledge

22 October 2014, Roma, Italy

Hosted by IC3K'2014 – The 6th International Joint Conference on Knowledge
Discovery, Knowledge Engineering and Knowledge Management

Organizers

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Scope

“*Software Knowledge*” – in short SKY – means that software in its higher abstraction levels is a new kind of *knowledge*, *Runnable knowledge*. Thus, the classes and relationships of a software UML diagram are easily viewed as the classes and relationships of a knowledge ontology.

For further details visit SoftwareKnowledge.org.

The main theme of the SKY2014 Workshop is *Requirements and Software Knowledge*. Time is ripe to investigate the promising implications of Software Knowledge ideas to real life Software Systems' Requirements.

The Workshop main objective is to discuss and propose practical tools to deal not only with experimental and laboratory research, but to facilitate formulation and verification of requirements for industrial grade and production software systems.

Topics of Interest

Software Knowledge is a *runnable expression of meaning*. Running facilitates understanding in a very general sense. This is the rationale for the debugging process in a micro scale, where one runs and breaks at desired points to understand the reason of software failures. This is the basis of agile methods to manufacture and test concurrently, in a medium scale. This is the possible source of great new tools, in a macro scale, from the software hierarchy *highest abstraction levels* down to executable code.

SKY2014 topics of relevance include but are not limited to:

Software-Knowledge Requirements, Tools and Operations

- Software-Knowledge Requirements for Large Scale Systems
- Abstract Operations for Industrial Applications
- Software-Knowledge selectivity and traceability
- Software-Knowledge Sharing: Meta-models, interchange formats, and tools
- Knowledge Driven Architecture and Engineering

Software-Knowledge Runnability and Meaning

- Ontologies in complex systems
- Ontologies for Software Requirements verification
- Semantics above and beyond design patterns
- Runnable and testable knowledge representations
- Software-Knowledge representation and modeling
- Web dynamics and interestingness

Expected Outcomes

Expected outcomes of the SKY2014 Workshop are:

- Proposals of new tools for large-scale Software-Knowledge Requirements verification and production.
- A continuing effort to standardize a Software-Knowledge representation consisting of software models encompassing semantics as first class objects.

Important Dates

July 27, 2014: Full & Position Papers Submission

August 4, 2014: Authors Notification

August 14, 2014: Final Paper Submission and Registration

October 22, 2014: Full day Workshop

Program Committee

- Hernán Astudillo, Universidad Técnica Federico Santa María, Chile
- Sidney C. Bailin, Knowledge Evolution, Inc., USA
- Dragan Djuric, University of Belgrade, Serbia
- Shlomi Dolev, Ben-Gurion University, Israel
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- Anabel Fraga, Universidad Carlos III de Madrid, Spain
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- Michal Smialek, Warsaw University of Technology, Poland
- Daniel Speicher, University of Bonn, Germany
- Ioan Toma, University of Innsbruck, Austria
- Rafael Valencia Garcia, Universidad de Murcia, Spain
- Reuven Yagel, JCE Jerusalem College of Engineering – Azrieli, Israel
- Rachel Ben-Elyahu Zohari, JCE Jerusalem College of Engineering – Azrieli, Israel

Invited Speakers

Following the tradition established in previous years, SKY'2014 will invite recognized researchers to deliver invited talks in the workshop.

Paper Submission

Prospective authors are invited to submit papers in any of the topics listed above. Instructions for preparing the manuscript (in Word and Latex formats) are available at: [Paper Templates](#). Please also check the [Submission Guidelines](#). Papers should be submitted electronically via the web-based submission system at: <http://www.insticc.org/Primoris>

Publications

All accepted papers, including position papers, will be published in the workshop proceedings book and on CD-ROM support, under an ISBN reference.

All papers presented at the conference venue will be available at the SciTePress Digital Library (<http://www.scitepress.org/DigitalLibrary/>). SciTePress is a member of CrossRef (<http://www.crossref.org/>).

Previous Editions

For information on previous SKY Workshops please visit the SoftwareKnowledge.org web site.

Registration Information

At least one author of an accepted paper must register for the workshop, and the registration fees received by **August 19, 2014**, in order to have the paper published in the workshop proceedings book.

Secretariat Contacts

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