

SKY'2017

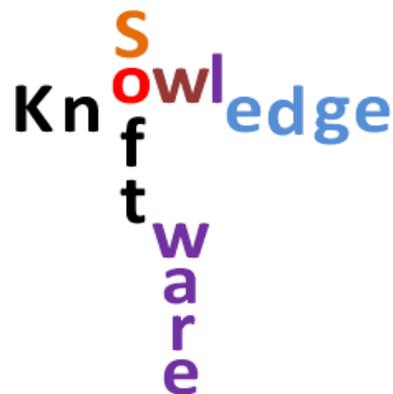
Software is Knowledge

8th International Workshop on Software Knowledge
01-03 November 2017, Funchal, Madeira, Portugal

Hosted by IC3K'2017 – The 9th International Joint Conference on
Knowledge Discovery, Knowledge Engineering and Knowledge Management

Call for **Challenge** Papers

Submission deadline: 6/October/2017



Kn**o**wl**e**dge
S**o**ft**w**are

Software is Knowledge and Knowledge is power.

What was the motivation for Google, a software company, to enter the market of autonomous vehicles? Why this and other software companies totally disrupted the traditional vehicles market, from small cars to giant trucks? Why so many people are in danger of losing their jobs in developed countries? Why intelligent people are afraid of their lives being challenged by Artificial Intelligence?

The short answer: **Software is Knowledge and Knowledge is power.**

Software Knowledge is a difficult, important and continuing effort that will radically change software and system industries.

Organizers

laakov Exman

The Jerusalem College of Engineering, JCE, Azrieli (Israel) – Software Engineering
e-mail: laakov@jce.ac.il

Anabel Fraga

Carlos III of Madrid University (Spain) – Computer Science
e-mail: anabel.fraga@uc3m.es

Juan Llorens

Carlos III of Madrid University (Spain) – Computer Science
e-mail: juan.llorens@uc3m.es

Points of View

1- CONCEPTUAL INTEGRITY

As suggested by Fred Brooks, based upon his extensive experience of systems development, and deep considerations: “The most important factor for successful design and development of systems is *Conceptual Integrity*”, where concepts are the “atoms” of Knowledge.

2- SYSTEM MODELING

System modeling (by UML or SYSML or even MODELICA) is essential for rational system design and development. But that’s not enough. One should go upwards one more layer of abstraction and start with an *application ontology*. From the ontology one can obviously generate UML class diagrams and so on. One then has a much deeper understanding of the system.

3- PRECISE REQUIREMENTS

Critical and very complex systems, such as aircraft, demand zero software bugs. Otherwise, human lives are endangered and giant financial losses are incurred. *Precise system requirements* should therefore be formulated and understood by all the involved people, be they developers or stakeholders.

Important Dates

Position and Challenge Paper Submission: October 6, 2017

Authors Notification: October 10, 2017

Camera Ready and Registration: October 16, 2017

Full day Workshop: November 02, 2017

Position and **Challenge** Paper Submission

Prospective authors from the academic and industrial environments are invited to submit Short Position papers relevant to the **Points of View** listed above. Certain accepted papers will be classified as **Challenge** Papers (see below).

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.

Challenge Papers

All accepted Short Position Papers will be classified into two groups by the SKY Program Committee:

- a- *Classical Position Papers* – describing ongoing work, with preliminary results;
- b- **Challenge Papers** – with significant new ideas, eventually opening a new research branch in Software Knowledge;

Authors will be informed of the classification of their papers in the authors' notification.

The **best Challenge paper**, chosen by the SKY Program Committee will receive a certificate in a ceremony during the conference.

Publications

All accepted **Position and Challenge 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/>).

Registration Information

At least one author of an accepted paper must register for the workshop, and the registration fees received by **October 16, 2017**, in order to publish the paper and if selected among the best Challenge papers to receive the corresponding certificate.

Secretariat Contacts

e-mail: ic3k.secretariat@insticc.org