

1st International Workshop on Foundations and Techniques for Open Source Software Certification

Braga, Portugal - 31 March, 2007

<http://opencert.iist.unu.edu/>

Satellite Event of ETAPS 2007

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Background and Objectives

The aim of this workshop is to bring together researchers from academia and industry who are interested in developing techniques for the quality assessment of Open Source Software (OSS), leading to the definition of a complete certification process.

In recent years, Open Source Software (OSS) has gained considerable interest. Several reasons for this growing popularity can be identified:

- Successful OSS projects, like the Linux operating system, the Mozilla web browser and the Apache web-server, have demonstrated the strength of the OSS development process.
- Today, governments all over the world are becoming aware of growing dependence on proprietary formats and software in their administration.
- OSS is free, and companies are beginning to reduce their development costs by integrating OSS into their products.

However, state-of-the-art OSS development has two main weaknesses: (1) it is hard to objectively assess the quality of OSS, and (2) OSS projects are hard to control and to predict due to the lack of central management. These make the use of OSS a risk, especially in security-sensitive domains. A standard approach to reduce such a risk is to establish an independent certification process. However, today we lack standards and methods to certify the quality of OSS. The workshop will focus on formal methods and model-based techniques that appear promising to facilitate OSS certification. Techniques should take those aspects into account which are specific to OSS, such as unconventional development, rapid evolution of the code, and huge amount of legacy code.

Contributions to the workshop are expected to present foundations, methods, tools and case studies that integrate techniques from different areas such as

- product and process certification
- formal modelling
- formal verification: model checking & theorem proving
- reverse engineering
- static analysis, testing and inspection
- safety and security
- language design and evolving systems
- empirical software engineering
- case studies

The one-day workshop will feature keynote speaker and contributed paper presentations. All submitted papers will undergo a peer-review process. Accepted papers will be published by Elsevier in the series Electronic Notes in Theoretical Computer Science (ENTCS). Detailed information on the submission procedure will be available on the conference website. Publication of a selection of the papers in a special issue of a journal is also under consideration.

Submission

Submissions to the workshop must not have been published or be concurrently considered for publication elsewhere. All submissions will be judged on the basis of originality, contribution to the field, technical and presentation quality, and relevance to the workshop. Papers should be written in English and not exceed 16 pages in ENTCS format (see <http://www.entcs.org/prelim.html>). All enquiries should be sent to: opencert07@di.uminho.pt

Important Dates

- **Submission deadline: 8 January, 2007**
- Acceptance notification: 25 January, 2007
- Final version due: 3 February, 2007