

Call for Papers

FLOSS-FM & OpenCert 2008 Joint Workshop

OpenCert 2008

2nd International Workshop on Foundations and Techniques for
OPEN SOURCE SOFTWARE CERTIFICATION

FLOSS-FM 2008

International Workshop on Foundations and Techniques
bringing together Free/Libre Open Source Software and Formal Methods

Milan, Italy - 10 September 2008

Satellite Event of OSS 2008

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

<http://floss-fm.it.uc3m.es/>

Submission deadline: June 23rd, 2008

OBJECTIVES

The aim of this joint workshop is to bring together researchers from academia and industry who are broadly interested in (1) the quality assessment of open source projects, ultimately leading to the establishment of a complete certification process; (2) the application of open source technologies and techniques to the Formal Methods world, and conversely, in developing formal methods for use in conjunction with open source projects.

BACKGROUND

Over the last decade, the importance of open source software has increased dramatically, some of the reasons behind the increase being:

- the outstanding success of flagship open source projects, notably the Linux operating system, the Apache web server and the Mozilla Web browser;
- the movement by local, regional and national governments throughout the world toward the use of open source software in their administrative processes in order to reduce reliance on proprietary formats and software and thereby achieve greater control over security;
- the fact that the use of open source software often leads to substantial cost savings;
- the fact that in resource-poor environments, open source development generally constitutes a more appropriate technology than similar or equivalent proprietary offerings.

Moreover, open source development brings novel sociological and economic advances, notably collaborative context and worth based on availability rather than exclusivity. Formal Methods developers have as much to gain as anyone from this changing socio-economic landscape.

Yet other characteristics of open source software - its pervasiveness, an unconventional development model, the permanent public availability of legacy code, rapid evolution, mean that

- it is hard to objectively assess the quality of an open source project at any particular moment;
- open source projects are hard to control or predict

and thus open source software is not only an opportunity but also a challenge for Formal Methods practitioners. It can appear a risk in

the security-sensitive domains that traditionally have been the preserve of Formal Methods.

A standard approach to reducing such a risk is to establish an independent certification process. However, today we lack standards and methods by which to certify the quality of open source software.

The FLOSS-FM part of the joint workshop will treat themes which deal with the conjunction of open source software and Formal Methods in any way, such as the development of formal methods tools via or incorporating open source software, or formal methods aimed at open source, or models and techniques that treat of the two areas in synergy with each other. The OpenCert part of the joint workshop will focus in particular on model-based techniques and formal methods that appear promising for the facilitation of open source certification, as well as on any empirical studies .

We will accept both foundational papers and practical reports, including case studies. Areas to address include:

- Formal Methods tools constructed using open source tools or incorporating open source components or development techniques;
- open source projects using formal methods in their development, or whose processes or products have been verified, evaluated or modeled using formal methods;
- new and/or existing formal methods and/or tools which are particularly suited to open source contexts, and/or experience with them;
- new and/or existing certification processes and tools suitable for open source contexts, and/or experience with them;
- foundational and methodological contributions in these areas;
- position papers relative to the above;
- 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

which aim to overcome the challenges to assessment and certification for open source software or the secure application of open source techniques to Formal Methods.

The one-day workshop will feature keynote speakers and contributed paper presentations. All submitted papers will undergo a peer-review process. Accepted papers will be electronically published with ISBN number. 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.

Papers not specifically directed to one of FLOSS-FM or OpenCert will be assigned by the Program Committee to one or the other.

SUBMISSION

Submissions to the joint 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 and prepared using the format available at

<http://oss2008.dti.unimi.it/index.php?id=authorKit.htm>

Papers must be submitted electronically via:

<http://www.easychair.org/conferences/?conf=flossfmopencert2008>

All enquiries should be sent to one of (these list addresses have the same recipients):

mailto: floss-fm@inv.it.uc3m.es, opencert@iist.unu.edu

IMPORTANT DATES

- Submission deadline: June 23rd, 2008
- Acceptance notification: June 30th, 2008

- Final version due: July 7th, 2008

ORGANISERS

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