6th IEEE International Working Conference on Mining Software Repositories

Vancouver, Canada
May 16–17, 2009
http://msrconf.org

Co-located with ICSE 2009

Overview

Software repositories such as source control systems, archived communications between project personnel, and defect tracking systems are used to help manage the progress of software projects. Software practitioners and researchers are recognizing the benefits of mining this information to support the maintenance of software systems, improve software design/reuse, and empirically validate novel ideas and techniques. Research is now proceeding to uncover the ways in which mining these repositories can help to understand software development and software evolution, to support predictions about software development, and to exploit this knowledge concretely in planning future development.

The goal of this two-day working conference is to advance the science and practice of software engineering via the analysis of data stored in software repositories. We solicit poster papers (max: 4 pages) and research papers (max: 10 pages) for the main part of the conference. Additionally, we solicit submissions to the MSR Challenge 2009, described below. Poster papers should discuss controversial issues in the field, or describe interesting or thought provoking ideas that are not yet fully developed. Authors of accepted poster papers will present their ideas in poster form during a dedicated session at the conference, and also in a short lightning talk. Research papers are expected to describe new research results, and have a higher degree of technical rigor than poster papers. Authors of accepted research papers will present their ideas in a research talk at the conference. Paper submissions must be formatted according to ICSE guidelines. A selection of the best research papers will be invited for consideration in a special issue of the Springer journal *Empirical Software Engineering*.

Papers may address issues along the general themes, including but not limited to the following:
- Models for social and development processes that occur in large software projects
- Prediction of future software qualities via analysis of software repositories
- Models of software project evolution based on historical repository data
- Prediction, characterization, and classification of software defects based on analysis of software repositories
- Techniques to model reliability and defect occurrences
- Search-based software engineering, including search techniques to assist developers in finding suitable components and code fragments for reuse, and software search engines
- Analysis of change patterns to assist in future development
- Visualization techniques and models of mined data
- Techniques, tools, and interchange formats for capturing new forms of data for storage in software repositories, such as effort data, fine-grain changes, and refactoring
- Approaches, applications, and tools for software repository mining
- Quality aspects and guidelines to ensure quality results in mining
- Meta-models, exchange formats, and infrastructure tools to ease sharing of extracted data and to encourage reuse
- Case studies on extracting data from repositories of large long-lived projects
- Methods of integrating mined data from various historical sources

MSR Challenge 2009

We invite researchers to demonstrate the usefulness of their mining tools on the source code repositories, bug data, and mailing list archives of the GNOME desktop suite by participating in the two MSR Challenge tracks:
1. *General Track:* Discover interesting facts about the history of the GNOME desktop suite. Results should be reported as 4-page (max) submissions, to be included in the proceedings as challenge papers.
2. *Prediction Track:* We challenge you to predict the code growth in core GNOME projects in terms of source lines of code from February 1st to April 30th, 2009. You can provide 1-page descriptions of the rationale behind your prediction. Wild guesses are also welcome and will put "real" miners under pressure.

The winners of both tracks will receive an award. See the MSR homepage for more information about requirements and rules.

MSR 2009 Important Dates

Predictions due (challenge #2)	31 Jan	2009
Abstracts due (research/poster papers)	1 March	2009
Submission deadline (research/poster papers)	6 March	2009
Submission deadline (challenge #1)	13 March	2009
Notifications sent out (all papers/challenge #1)	10 April	2009
Camera ready due	22 April	2009

Organizers

General chair	Katsuro Inoue, U. of Osaka, Japan
Program chairs	Michael Godfrey, U. of Waterloo, Canada
	Jim Whitehead, UC-Santa Cruz, USA
Challenge chair	Christian Bird, UC-Davis, USA