PROMISE 2015

The 11th International Conference on Predictive Models and Data Analytics in Software Engineering

October 21, 2015, Beijing, China
Co-located with ESEM 2015 - 9th International Symposium on Empirical Software Engineering and Measurement
http://promisedata.org/2015/

Sponsored by:
Microsoft Research

CALL FOR PAPERS

PROMISE is an annual forum for researchers and practitioners to present, discuss and exchange ideas, results, expertise and experiences in construction and/or application of predictive models and data analytics in software engineering. Such models and analyses could be targeted at: planning, design, implementation, testing, maintenance, quality assurance, evaluation, process improvement, management, decision making, and risk assessment in software and systems development. PROMISE is distinguished from similar forums with its public data repository and focus on methodological details, providing a unique interdisciplinary venue for software engineering and data mining communities, and seeking for verifiable and repeatable experiments that are useful in practice.

Topics of Interest

Topics of interest include, but are not limited to:

Application oriented:
- using predictive models and software data analytics in policy and decision-making;
- predicting for cost, effort, quality, defects, business value;
- quantification and prediction of other intermediate or final properties of interest in software development regarding people, process or product aspects;
- using predictive models and data analytics in different settings, e.g. lean/agile, waterfall, distributed, community-based software development;
- dealing with changing environments in software engineering tasks;
- dealing with multiple-objectives in software engineering tasks.

Theory oriented:
- model construction, evaluation, sharing and reusability;
- interdisciplinary and novel approaches to predictive modelling and data analytics that contribute to the theoretical body of knowledge in software engineering;
- verifying/refuting/challenging previous theory and results;
- combinations of predictive models and search-based software engineering;
- the effectiveness of human experts vs. automated models in predictions.

Data oriented:
- contributions to the repository;
- data quality, sharing, and privacy;
- ethical issues related to data collection;
- metrics;
- tools and frameworks to support researchers and practitioners to collect data and construct models to share/repeat experiments and results.

*** Student Poster Competition ***

This year we will also have a student poster competition open to short papers whose lead author is a student. The papers may have co-authors, but the student must be the lead author and present the poster at the conference. Students can be either undergrad or postgrad students. No distinction will be made between undergrad and postgrad students in the judging process. A letter confirming the enrolment of the student in a university will be required upon paper acceptance. Posters will be judged by a panel during the conference.

Kinds of Papers

We invite all kinds of empirical studies on the topics of interest (e.g. case studies, meta-analysis, replications, experiments, simulations, surveys etc.), as well as industrial experience reports detailing the application of predictive modelling and data analytics in industrial settings. Both positive and negative results are welcome, though negative results should still be based on rigorous research and provide details on lessons learned.

Following the tradition, PROMISE 2015 will give the highest priority to studies based on publicly available datasets. It is therefore encouraged, but not mandatory, that conference attendees contribute the data used in their analysis to the on-line PROMISE data repository (http://openscience.us/). We also encourage authors to submit their source codes to the repository.

Submissions can be of the following kinds:
- Full papers (oral presentation, 10 pages): papers with novel and complete results.
- Short papers (oral presentation, 4 pages): papers to disseminate on-going work and preliminary results for early feedback, or vision papers about the future of predictive modelling and data analytics in software engineering.
- Short paper (student poster competition, 2 pages): papers to disseminate on-going work and preliminary results for early feedback.

Keynote

Keynote by Dr. Dongmei Zhang from Microsoft Research, China.

Important dates

Submission deadline: June 17th, 2015
Notification date: July 20th, 2015
Camera-ready copy: July 27th, 2015 (TBA)

Submissions

PROMISE 2015 submissions must meet the following criteria:
- be original work, not published or under review elsewhere;
- conform to the ACM SIG proceedings templates from http://goo.gl/wE1k
- not exceed 10 pages for full papers, 4 pages for oral presentation short papers and 2 pages for poster competition short papers, including references;
- papers should be submitted via EasyChair (please choose the paper category appropriately): https://easychair.org/conferences/?conf=promise2015

Accepted papers will be published in the ACM digital library.

Organisation

Steering Committee:

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Massimiliano Di Penta, University of Sannio, Italy
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