SWEN 6301: Research Paper Proposal

Due on October 6, 2018 at 2:00 PM (noon)

Instructor: Ahmed Tamrawi

Call for Papers

Software is in every aspect of our lives. From mobile phones and heart regulators to self-driving cars and nuclear reactors. Therefore, software failures can lead to catastrophic sequences. To avoid such catastrophic results and boost the success of software construction, many have proposed software development practices to guide software practitioners to construct a software that is error-free, scalable, maintainable and secure. To realize the importance of the software construction process, we are seeking short paper submissions to discuss state-of-the-art approaches and tools used through the various stages of the software development process.

Submissions

We encourage the submission of short papers (4-6 pages, including figures, tables, appendices, and references). Submitted papers must address recent trends, problems, and tools used through the software construction process via systematic investigations. This includes problems in the various stages of the software construction process including (but not limited to): architecture, design, coding, testing, coding review, bug fixing, software documentation and software maintenance.

For example, a paper may describe an application and evaluation of basic research ideas in the software construction process to an industrially-relevant context, an empirical study of an industrially-relevant issue, a rigorous report of industrially-relevant experience, and so on. Negative results are encouraged as analysis of failures is rare. For example, determining in a principled way where or why current research cannot be applied on industrially-relevant problems is an important and often overlooked aspect of software engineering.

Papers will be evaluated primarily on potential impact, real-world focus, and its systematic thorough investigation of the proposed subject: each paper should describe a problem of practical importance, explain how the problem was investigated and in what context, and present recent trends and tools used to address the problem and present evidence for the paper's conclusions. Other aspects that should be included if appropriate are: discussing why the resolution of the problem is innovative, (cost-) effective, or efficient; providing a concise explanation of the approach, techniques, and methodologies employed; considering how relevant was the context to these results and whether other contexts would yield similar results; and explaining the insights or best practices that emerged, tools developed, and/or software processes involved.

Formatting and Submission Guidelines

All submissions must conform to the IEEE Conference Proceedings Formatting Guidelines[1] (title in 24pt font and full text in 10pt type, LaTeX users must use \ `documentclass[10pt,conference]{IEEEtran}` without including the `compsoc` or `compsocconf` option). Papers can be submitted via Ritaj or email.

Important Dates for Paper submissions

- Abstract Submissions (up to 500 words) Due: 13th October, 2018
- Notification of Acceptance: 20th October, 2018
- Paper Submissions Due: 10th November, 2018

Grading

The abstract submission is worth 5% of the total course grade and the paper submission is worth 15% of the total course grade. We expect everyone to respect the set deadlines and conform to the agreed upon formatting styles and guidelines. Please, contact me for any clarifications or questions.

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[1] http://www.ieee.org/conferences_events/conferences/publishing/templates.html