

## Guest Editors

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## Call for Papers

### **Global Software Engineering Education Special Issue of the ACM Journal Transactions on Computing Education**

Abstract Submission Deadline Dec 15, 2016

Full paper submission deadline, Mar 15, 2017

We are pleased to announce a Special Issue on **Global Software Engineering Education** that will be published by the ACM Transactions on Computing Education (TOCE) in 2017. ACM TOCE covers diverse aspects of computing education by publishing papers with a scholarly approach to teaching and learning, a broad appeal to educational practitioners, and a clear connection to student learning. This special issue focuses on contemporary issues in Computer Science and Software Engineering Education. In preparing students for the workplace, universities are recognizing the need to provide courses that address the challenges of distributed development. This special issue will present research that facilitates course leaders embarking on Global Software Engineering Education (GSE-Ed).

We solicit research papers on any aspect of GSE-Ed, ranging from problems experienced in the classroom and lessons learned, to frameworks that provide a complete solution. While we encourage practical-experience based papers, we also will consider papers that present a theoretical perspective.

Key goals of the special issue include the following: to provide sound examples of courses, initiatives or models for GSE-Ed; to address current outstanding issues; and to identify new directions for future research and education. We also invite contributions on innovative ways of teaching GSE.

This special issue focuses on multiple aspects of education involving collaborative and distributed software development. Topics of interest to the guest editors include, but are not limited to, the following aspects of global software engineering education:

- Global Distance (between participating organizations/groups/institutions)
  - Language and cultural distance
  - Temporal distance
  - Geographic distance
  - Organizational/Institutional distance
- Teamwork
- Curriculum/pedagogy
  - Design, assessment, evaluation, learning outcomes
- Stakeholders and roles in GSE-Ed
- Infrastructure and tools
  - Specific technologies in support of GSE-Ed, establishment and management
- People/soft issues
  - Motivation and Trust
- Development process
  - Process, product architecture
- Innovative ways of teaching GSE
  - such as using simulations or open source solutions

Of particular interest are papers that address areas of GSE-Ed which have had limited coverage to date:

- the individual student role
- the client or customer role in GSE-Ed, addressing the need for collaboration between universities and organizations,
- the 'University representative' role, addressing issues from an external, cross-institution and intra-institutional linking aspect,
- work relating to a team's readiness for conducting GSE
- work relating to assessing a university's readiness for conducting GSE
- research into strategies for successfully sustaining such courses on a long term basis

This special issue on Global Software Engineering Education, has been sparked by recent interest in GSE-Ed evident at a workshop held in August 2016 at the International

Conference on Global Software Engineering (2016); see [www.icgse.org](http://www.icgse.org) and <http://gse.sivrex.com/>. Papers are available in the IEEE Explore digital library. That workshop was triggered by an ITICSE Working Group report which produced a systematic literature review of the field:

Clear, T., Beecham, S., Barr, J., Daniels, M., McDermott, R., Oudshoorn, M., Savickaite, A., and Noll, J., 2015. Challenges and Recommendations for the Design and Conduct of Global Software Engineering Courses: A Systematic Review. In *Proceedings of the Working Group Reports of the 2015 on Innovation & Technology in Computer Science Education Conference*, N. Ragonis and P. Kinnunen Eds. ACM, New York, 1-39. DOI= <http://dx.doi.org/http://dx.doi.org/10.1145/2858796.2858797>.

This is an open call. However, authors of papers to the recent GSE-Ed'16 workshop are invited to submit extended versions of their papers for the special issue. We expect that submissions should appropriately build on prior work, and incorporate a suitable level of empirical evaluation to meet the journal's guidelines for authors at <http://toce.acm.org/authors.cfm>. In order for a workshop paper to be published as a TOCE article, it must contain approximately 30% new material, which must include new ideas and content, and not just additional text. The extension should be explained in the article in relation to the conference paper, and the conference paper should be cited in the extended article. Please also note that the extended article should have a different title from the conference paper.

Preference will be given to contributions that present some form of empirical evaluation.

### Important Dates

Extended Abstracts (up to 1,000 words) due	December 15, 2017
Decisions on abstracts	January 15, 2017
Full papers due	March 15, 2017
Notification of acceptance	June 15, 2017
Revised manuscripts due	August 15, 2017
Special Issue published	September, 2017

Extended abstract submissions should be sent as a .pdf file to the guest editors at ([tony.clear@aut.ac.nz](mailto:tony.clear@aut.ac.nz), [sarah.beecham@lero.ie](mailto:sarah.beecham@lero.ie)). Full submissions must be submitted via Manuscript Central (<http://mc.manuscriptcentral.com/toce>), under the special submission category set up for the special issue.

TOCE uses the Small Standard Journal Format, as found at <http://www.acm.org/publications/acm-word-style-guide>. Use this style for your extended abstract as well as your final paper if your abstract is accepted. For more information about TOCE and the author guidelines, see <http://toce.acm.org/authors.cfm>.

More information about the TOCE review criteria can be found on <http://toce.acm.org/authors.html>.

Please email the guest editors directly if you have any additional questions.