ICSE Software Engineering Education and Training Track (SEET)

Conference on Software Engineering Education and Training (CSEE&T)

For 2015 the ICSE Software Engineering Education and Training Track (SEET) and the Conference on Software Engineering Education and Training (CSEE&T) have combined to produce a joint program. This will run as part of both conferences, which will be co-located. The following document contains the calls for papers both for this joint program and for the other activities that will make up CSEE&T.

JSEET - Joint Software Engineering Education and Training

A Joint Program of the ICSE Software Engineering Education and Training Track (SEET) and the Conference on Software Engineering Education and Training (CSEE&T)

CALL FOR PAPERS

Theme: Software Engineering Education and Training: System Thinking and System Scale

Aims and Scope

The emergence of software engineering as a new term in the discipline of Computer Science / Computing / Informatics has created significant challenges for educators. Embracing this new concept requires a transition from a discipline of lone wolves and artistic heroes to a discipline of engineers focusing on product development in a planned process under constrained time, budget, and other resources but leading to a predictable quality. Some of the issues involved could be taught well in classrooms. For others, even project-based instruction provides only a weak proxy for training and learning while on the job. Team issues notably show a very different face in educational settings than in the field.

The area of software has been continuously expanding, and today, the software development concerns are not only related to pure software matters, such as software architecture, design, implementation and testing, but also to other systems and the environment in which the software is performing. Questions of safety, security, sustainability, usability and particularly scalability are now just as important as questions relating to the functional requirements. Also, as systems increase in scale, software development requires more and more system-related reasoning, which makes software engineering education and training even more challenging. How can we teach software engineers (students or other trainees) to cope with problems of scale? To what extent should system thinking be a part of software engineering education? As well as being experts in designing software, how far should software developers also be experts in system engineering or other application domains?

Topics of Interest

JSEET 2015 is looking for contributions that address new challenges and best practices in software engineering and training. While we welcome submissions on all topics related to software engineering education and training, we are particularly interested in submissions exploring recent developments in aspects of incorporating software engineering with system engineering, or emphasizing system concerns such as sustainability, dependability, usability, scalability, different types of systems, and similar.

The track is intended to cover a wide range of topics, including (but not limited to):

- software and system development;
- new best practices for SEET;
- innovative curriculum or course formats;
- blending software engineering and other disciplines, such as music, art and psychology;
- blending software engineering and other engineering disciplines, such as electrical engineering and bioengineering;
- exploring the widespread adoption of mobile devices for SEET;
- multidisciplinary team development and project management;
- domain engineering;
- social and cultural issues;
- global and distributed software engineering;
- cooperation in education between industry and academia;
- methodological aspects of software engineering education;
- continuous education to cope with technological change.
Format and Submissions for the JSEET:

- **Full papers**, up to 10 pages, documenting results and findings, where the research presented has followed established research methods;
- **Short papers**, up to 4 pages, reporting novel results that have not been fully evaluated, which will be presented as posters;
- **Case study papers**, up to 10 pages, reporting on novel courses, tools, or delivery formats;
- **Panel session proposals**, up to 4 pages, which describe the topic to be discussed, explain why this topic will be of interest and give details of the proposed panel membership. Note that proposals for panel sessions will be considered for inclusion in either JSEET or CSEE&T, as determined by the program committee.

The detailed submission guidelines for each category (e.g. maximum page length, formatting requirements) are provided at the submission page, and formatting guidelines can be found at the author instruction page. Papers must be submitted electronically through EasyChair.

CSEE&T - Conference on Software Engineering Education and Training

As its name suggests, JSEET combines parts of the program of ICSE and CSEE&T. As well as the submissions for JSEET, CSEE&T also invites submissions for the parts of its program that will be separate from JSEET.

CALL FOR OTHER CONTRIBUTIONS

**Theme: Software Engineering Education and Training: System Thinking and System Scale**

**Aims and Scope**

As well as research papers and panel sessions, CSEE&T has a long tradition of providing workshops, tutorials and similar activities that focus on helping SE educators to develop their skills and practice. The aims of these should ideally reflect the aims of the research papers in addressing the same key questions, namely:

- How can we make team issues as realistic as possible?
- How can we teach software engineering students or trainees to cope with problems of scale?
- To what extent should system thinking be a part of software engineering education?
- As well as being experts in designing software, how far should software developers also be experts in system engineering or other application domains?

Similarly, the topics of interest for such activities should ideally reflect ones in the list for the research papers, but again this is not intended as a restrictive list, and proposals that focus on other topics which are relevant to current issues in SE education will be welcome.

Format and Submissions for CSEE&T:

- **Highly collaborative workshops**, up to 4 pages, which describe the topic of the workshop, explain why this topic will be of interest, and give details of the organization of the workshop and those who will lead it;
- **Tutorials (typically lasting two sessions)**, up to 3 pages, which describe the topic of the tutorial, explain why this topic will be of interest, and give brief details of those who will lead it;
- **Practice and Methods presentations (typically lasting one session)**, up to 3 pages, which describe the topic of the presentation, explain why this topic will be of interest, and give brief details of those who will lead it;
- **Panel session proposals**, up to 4 pages, which describe the topic to be discussed, explain why this topic will be of interest and give details of the proposed panel membership. Note that proposals for panel sessions will be considered for inclusion in either JSEET or CSEE&T, as determined by the program committee.

The detailed submission guidelines for each category (e.g. maximum page length, formatting requirements) are provided at the submission page, and formatting guidelines can be found at the author instruction page. Papers must be submitted electronically through EasyChair.

**Important Dates (for both JSEET and CSEE&T)**

- Submission deadline: Oct 24, 2014
- Notification of reviewing decisions: Jan 21, 2015
- Deadline for camera-ready copy: Feb 13, 2015
Organization

JSEET Program Chairs

Tony Cowling, The University of Sheffield, UK
Ivica Crnkovic, Mälardalen University, Sweden

CSEET

General Chair: Tony Cowling, The University of Sheffield, UK
Program Chair: Rich LeBlanc, Seattle University, USA