CALL FOR PAPERS

SPICE 2020

The 19th International Conference

Software Process Improvement and Capability dEtermination

Roskilde, Denmark

6 – 8 April, 2020

http://www.spiceconference.com

The SPICE User Group is pleased to announce the nineteenth International Conference on Process Improvement and Capability dEtermination in Software, Systems Engineering and Service Management, to be held in Roskilde, Denmark from 6-8 April 2020.

The conference is hosted on behalf of the SPICE User Group by CIRCLE – the Center for Interdisciplinary Research and Education in Circular Economy and Sustainability at Roskilde University.

The 2020 Conference will to have a particular focus on the application of assessment based improvement to innovation, lean and agile, product and project development projects, and enterprise processes including approaches for evaluating process quality characteristics other than process capability.

Submissions are sought in the following categories:

• Research Papers (full papers)

Research papers should describe innovative and significant work in process modelling, assessment and improvement, particularly relating to the application of best practices and standards related to product, software, system, and services engineering, quality management, testing, functional safety, and security. Also, the impact of emerging architectural paradigms, such as microservices and Function as a Service, on software development and process assessment. Papers should be a maximum of 12 pages.

• Industrial Experience Reports (short papers)

Reports on practical experiences related to process assessment and improvement across the domains of software engineering, systems engineering and IT service management are sought. Industry Papers should be a maximum of 8 pages.

The programme committee welcome high quality contributions to the conference on the following topics:

- The application of assessment based improvement to lean agile development;
- The definition and implementation of flexible and agile processes;

- The impact of contemporary architectural paradigms (e.g. microservices and Function as a Service) on software processes
- Model based improvement;
- Determination of risk, based on results of process assessment;
- Knowledge and skills for process assessment and improvement;
- Assessment approaches applied to lean agile development and operations;
- Definition of process quality characteristics to support process improvement;
- Empirical studies on characteristics of high maturity organizations;
- Processes and process models applicable to integrated management systems;
- Emerging process reference and assessment models;
- New concepts for process capability and maturity models;
- Use of process assessment in domains outside software, systems engineering and service management;
- Conformity assessment approaches and schemes for process assessment;
- New measurement and rating frameworks;
- Gamification as a tool for process adherence and/or process improvement:
- Best practice models and frameworks for digital capabilities;
- Remote assessment techniques;
- The role of situational context in process definition, adaptation and assessment.

The conference seeks contributions specifically relating to the following areas of application:

- Innovation, knowledge and technology transfer;
- Impact of software architectures on software process and process assessment;
- Software, systems engineering and service management;
- Automotive systems and software;
- Medical device and healthcare systems and software;
- Aerospace systems and software;
- Enterprise systems;
- Quality management systems;
- IS/IT security;
- Functional safety and cyber security;
- Digital transformation;
- Safety-related systems and software;
- Test process improvement;
- Financial institutions and banks;
- Small and very small enterprises;
- IT and public procurement.

SUBMISSIONS:

Contributions will be accepted in following formats:

- Research (full) papers (maximum 12 pages)
- Industry (short) papers (maximum 8 pages)

All paper submissions will be reviewed by members of the Programme Committee, with those judged best to meet the aims of the Conference selected for presentation.

It is expected that all accepted research papers and extended abstracts of industrial experience reports will be published in the Conference Proceedings by Springer-Verlag as part of the CCIS (Communications in Computer and Information Science) book series.

Accordingly papers must conform to the Springer CCIS format, identical to the LNCS (Lecture Notes in Computer Science) format. Please see the website (<u>http://www.spiceconference.com</u>) for complete author guidelines. Full Papers must not exceed 12 pages and Industry papers must not exceed 8 pages.

Note: For a paper to be published in the proceedings, Springer requires one author to sign a copyright release form. In addition, at least one of the authors must register (paid in full) to attend SPICE 2020 to present the paper. All papers will be published in both print and digital format (therefore all digital source files (doc/docx/latex/pictures, etc.) must be submitted).

SCHEDULE:

Paper submission deadline Notification of acceptance Final camera ready paper due Conference start date 2 December 2019 6 January 2020 13 January 2020 6 April 2020

CONFERENCE COMMITTEE:

General Chair: Alec Dorling (Impronova, Sweden) Program Chair: Terry Rout (Griffith University, Australia) Local Organizing Chair: Jan Pries-Heje (Roskilde University, Denmark) Proceedings Editors: Paul Clarke, Murat Yilmaz (Lero – the Irish Software Research Centre, Dublin City University, Ireland)

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