

SERF 2017

International Workshop on Software Engineering for Digital Forensics

Padeborn, Germany

In association with the 24th IEEE International Requirements Engineering Conference

serf.ucd.ie



ABOUT THE WORKSHOP

Digital forensic processes are concerned with discovering, collecting, preserving, analysing, interpreting, and presenting digital evidence from digital sources for proof of (anticipated) wrongdoing and ultimately prosecution of criminal activity. Though some notable progress has been achieved since then, the complexity of both crimes and criminal investigations has also increased tremendously. The availability of large amounts of heterogeneous structured and unstructured data about criminal activities, and the uncertainty of the environments in which these activities occur brings forth both significant challenges and new opportunities for designing and developing software that is intended to either defend itself against criminal attacks or to support the investigation of criminal activities.

The SERF workshop aims to explore the role of software engineering in the design of systems that support digital forensic investigations and/or implement some of the activities of a digital forensic process. More specifically, SERF is intended to be a multi-disciplinary workshop that will bring together researchers and practitioners in the areas of software engineering (SE) and digital forensics to identify existing challenges in the development of software for digital forensics, assess the status of approaches in tackling these challenges, create new opportunities for collaborations in this area and to strengthen the frontier of SE research in this problem domain.

TOPICS

These include, but are not limited to:

- Algorithms, monitoring and control techniques for live forensics
- Autonomic and adaptive software for digital forensics
- Empirical studies, experience, and lessons learned on the use of software engineering methodologies to support digital forensics
- Evolution and maintenance of digital forensic software
- Formal methods for the design and verification of digital forensic software
- Human aspects and cognitive factors in the design and use of digital forensic software
- Industry collaborations and insights
- Legal requirements compliance
- Model-based approaches for the design of digital forensic software
- Requirements elicitation, modelling, analysis, validation and verification for digital forensics
- Security and privacy
- Software architecture for digital forensics
- Software development methodologies for digital forensics tools
- Software performance for event reconstruction software
- Testing of software for digital forensics

PAPER SUBMISSION

We invite three types of submissions:

Research and Experience papers (8 pages)

intended to make all participants aware of existing and on-going research in this area.

Position Papers (4 pages)

presenting preliminary research into new requirements engineering techniques.

Vision Papers (4 pages)

exploring challenges of software engineering practices or presenting research roadmaps.

Papers under this category should not have been submitted for review or published elsewhere.

All submitted papers must be written in English and must follow ESEC/FSE 2017 submission guidelines. Submissions are accepted via easy chair from the workshop homepage.

IMPORTANT DATES

Submission deadline: May 12, 2017.

Author notification: June 16, 2017.

Camera-ready copy: July 3, 2017.

Workshop: September 4/5, 2017.

ORGANIZERS

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