



Call for Papers

Journal of Universal Computer Science (J.UCS) Special Issue on Information Security Methodology, Replication Studies and Information Security Education

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Background & Call for Manuscripts

In recent years, research started to focus on the scientific fundamentals of information security. These fundamentals include several important aspects such as the unified description of attacks and countermeasures, the reproducibility of experiments and means to achieve reproducibility, the sharing of research data and code, the discussion of quality criteria for experiments and the design and implementation of testbeds.

The related academic publications contributed to the advancement of information security research, e.g. by making research contributions easier to compare. Moreover, work on terminology and taxonomy addressed redundancies and unified the understanding between different sub-domains of information security.

This special issue desires to foster the progress in research on the scientific methodology of information security, to improve the links between sub-domains of information security research and to advance the discussion on the scientific methodology in information security. Moreover does this special issue welcome submissions that address aspects of higher education in information security and submissions that evaluate existing research results by reproducing experiments.

Topics of interest include, but are not limited to:

- Data collection and measurement in information security research.
- Work that reproduces existing experiments, i.e. that confirms/disproves experimental results or that shows how replication platforms can be realized in information security.
- Work that discusses the underlying criteria for the design and evaluation for cyber security research testbeds.
- Provision of novel testbeds that advance the understanding of information security sub-fields, e.g. by using visual analytics or by automating steps previously conducted manually.
- Evaluation of the novelty of research contributions and handling of scientific re-inventions.
- Methodology in network security, cryptography, information hiding, IoT security, system security, digital forensics, and other sub-disciplines of information security.
- Methodology for privacy, information sharing and collaborative work in the context of information security.
- Advanced methods and evaluations of approaches in teaching information security in higher education.
- Submissions that present shared information security research infrastructure, e.g. multi-national/multi-institutional testbeds or frameworks.
- Scientometric/bibliometric analyses, e.g. citation behavior, in information security.

This special issue on Information Security Methodology and Replication Studies is linked with the 1st International Workshop on Information Security Methodology and Replication Studies (IWSMR 2019) held in conjunction with the 14th International Conference on Availability, Reliability and Security (ARES) in Canterbury, UK. Both, **new research papers and selected papers from the IWSMR'19 workshop are invited for submission** to this special issue.

Important Deadlines

Submission by: 20 Jan 2020
Notification of authors by: 30 Apr 2020
Revised submission by: 10 Aug 2020
Notification about final decision by: 30 Nov 2020

Submission and Evaluation Procedure

The Journal of Universal Computer Science is a high-quality electronic publication that deals with all aspects of computer science. J.UCS has been appearing monthly since 1995 and is thus one of the oldest electronic journals with uninterrupted publication since its foundation. A number of special

issues as well as the printed archive editions of the volumes are also available in print and can be ordered directly from J.UCS office. The impact factor of J.UCS is 1.066, the 5-year impact factor 0.863 (2017). For further information, please refer to:

http://www.jucs.org/jucs_info/aims/unique_features.html

Manuscripts must be submitted in PDF format, written in English and should not exceed **20 pages**. Papers only prepared according to the JUCS's guidelines for authors and submitted online (see procedure described below) will be included in the review process. Illustrations and tables must be provided as integrated parts of the manuscript.

The guidelines for authors are available at:

http://www.jucs.org/ujs/jucs/info/submissions/style_guide.html

Only novel research papers which are currently not under review at another event or a journal are accepted for the review process. For more details, please also refer to:

http://www.jucs.org/ujs/jucs/info/special_issues/special_guidelines.html

For all potential authors who have received an invitation for an extended version of their IWSMR'19 paper, please bear in mind that we can only consider submissions which are significantly extended (at least 50 percent new material and the title of the extended version must clearly and unmistakably differ from the title of the article presented at the conference).

Please submit your original and proof-read papers not later than 20 Jan 2020 using the following submission link:

<https://easychair.org/conferences/?conf=jucsismre2020>

Each paper will be reviewed by at least 3 reviewers. According to the covered main subjects in the content, a selected set of reviewers with the appropriate expertise will be assigned.

Program Committee (tentative)

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