

WoSAR: The 9th International Workshop on Software Aging and Rejuvenation

October 23-26, 2017, Toulouse, France, co-located with ISSRE 2017 https://wosar2017.wordpress.com

Software aging is a problem of progressive degradation of performance and dependability in computer programs, especially those executing for long period of time. This phenomenon has been extensively studied since more than 20 years, as it affects many systems, from embedded devices to server software to critical systems.

Software rejuvenation, i.e. restart application of (components/threads/task), VMs or machines, is the most prominent approach to combat software aging. A variety of reactive and proactive rejuvenation techniques, scheduling plans, scope and granularity, have been proposed for different application categories and platforms.

WoSAR is the premier international venue to discuss the recent advances and discoveries in theoretical and practical aspects of software aging and rejuvenation research.

TOPICS OF INTEREST

This call for papers addresses all researchers and practitioners with an interest about performance and dependability degradation of software systems. Topics addressed in the workshop include but are not limited to:

- Progressive degradation of performability / availability / reliability / scalability / "-ilities" in software systems.
- Modeling and characterization of the software aging phenomenon.
- Design and evaluation of rejuvenation techniques.
- Analysis of aging-related faults/bugs, errors, and failures.
- Software test strategies for detecting aging-related bugs.
- Monitoring and detection of software aging effects (e.g., memory leaks, database index fragmentation, unterminated processes/threads, accrual of round-off errors, ...).
- New classes of software aging effects.
- Software aging and rejuvenation in Big Data and IoT Apps.
- Analytical, empirical, and experimental studies of any of the above topics.
- Analysis of real case studies.

For all the above topics, WoSAR is a unique forum to discuss the software aging and rejuvenation impacts on systems from different domains of applicability such as:

Cloud computing, Mobile, Embedded, Medical, Cyber-physical, SCADA, Smart Cities, Transportation, Telecommunication, Military, System of systems, and others.

IMPORTANT DATES

Full paper submission: July 21, 2017 Research paper notification: August 13, 2017 Submission of camera-ready copy: August 28, 2017

PAPER SUBMISSION

Authors are invited to submit high quality unpublished research work describing the results of theoretical and experimental software aging and rejuvenation research. All the accepted papers will be included in the IEEE Xplore Digital Library. Papers must be written in English and be formatted according to the IEEE authoring guidelines¹. Full papers should not exceed

seven pages in IEEE style. Paper submission will be done electronically through EasyChair².

JOURNAL SPECIAL ISSUE (PENDING)

Distinguished papers, after further revisions and approval, will be published in a special issue of a selected reputable journal.

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