

Message from the WoSAR 2022 Chairs

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On behalf of the WoSAR 2022 Organizing Committee, it is our pleasure to welcome you to the 14th Workshop on Software Aging and Rejuvenation, which is co-located with ISSRE 2022 in Charlotte, North Carolina, USA. WoSAR in its 14th edition continues to fulfill its mission as one of the most important venues for research presentation, publication, and collaboration of the Software Aging and Rejuvenation community. We bring together researchers from academia and industry working on the topic of software aging and rejuvenation, and related areas. We also welcome vision papers and student presentations. This year we have a very exciting program that is organized into three sessions.

The first session, “Software Rejuvenation Models”, features the invited keynote talk by Roberto Natella, titled *Rejuvenation On-The-Go: Addressing Software Aging in Android Mobile Systems*. This keynote talk presents recent work on software rejuvenation for the Android OS, based on measurement-based and micro-rejuvenation techniques, for reducing impact on availability. This session contains three research papers: (1) *A Markov Regenerative Model of Software Rejuvenation Beyond the Enabling Restriction* by Laura Carnevali, Marco Paolieri, Riccardo Reali, Leonardo Scommegna, and Enrico Vicario; (2) *Sequential Performance Analysis of Systems that Age and Rejuvenate* by Leonardo Nascimento, Cabral Lima, Daniel Menasché, and Guilherme Domingues; and (3) *Towards Making Unikernels Rejuvenatable* by Takeru Wada and Hiroshi Yamada.

The second session, “Software Rejuvenation and Runtime Models”, features the invited keynote talk by Jose Maria Maestre Torreblancas, titled *Software Rejuvenation and Cybersecurity Issues in Model Predictive Control*. This keynote talk presents several possibilities to combine software rejuvenation and model predictive control to deal with cyber-security threats. The second talk in this session is *Software Rejuvenation and Runtime Reliability Monitoring* by Alessandro Fantechi, Gloria Gori, and Marco Papini.

The third session, “Software Aging Models”, features three research papers: (1) *Analysis of Software Aging in a Blockchain Platform* by Douglas Dias, Fumio Machida, and Ermeson Andrade; (2) *Crash Injection to Persistent Memory for Recovery Code Validation* by Soichiro Sakamoto, Keita Suzuki, and Kenji Kono; and (3) *A Software-Aging-Related Bug Prediction Framework Based on Deep Learning and Weakly Supervised Oversampling* by Yancai Zhou, Jianwen Xiang, and Chen Zhang.

Finally, we would like to thank the organizing committee for the support in the organization of the workshop, and the program committee members for their effort in reviewing the papers and providing advice and constructive feedback to the paper authors.

Alberto Avritzer, eSulabSolutions, USA
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