Message from the GREENS 2018 Chairs

Welcome to GREENS 2018, the 6th International Workshop on Green and Sustainable Software, May 27, 2018, in Gothenburg, Sweden. GREENS 2018 is co-located with the 40th International Conference on Software Engineering (ICSE 2018).

The GREENS workshop provides a forum for practitioners and academics to share knowledge, ideas, practices, and current results related to green and sustainable software engineering. Engineering green software-intensive systems is critical in our drive towards a sustainable, smarter planet. The goal of green software engineering is to apply green principles to the design and operation of software-intensive systems. Green and self-greening software systems have tremendous potential to decrease energy consumption. Moreover, enterprise software can and should be re-thought to address sustainability issues using innovative business models, processes, and incentives. Monitoring and measuring the greenness of software is critical towards the notion of sustainable and green software. Demonstrating improvement is paramount for users to achieve and affect change. The GREENS 2018 theme is design patterns and reference architecture for green and sustainable software. Analysis of the sustainability of a specific software system requires software developers to weigh four major dimensions of sustainability – economic, social, environmental, and technical – which affects their trade-offs. The software engineering community must assume leadership in this important challenge.

The GREENS 2018 workshop is the sixth instance of the workshop, all organized in conjunction with the International Conference on Software Engineering (ICSE), and brings together researchers and practitioners to discuss both the state-of-the-art and state-of-the-practice in green software, including novel ideas, research challenges, methods, experiences, and tools to support the engineering of sustainable and energy efficient software systems.

To ensure high quality papers and presentations, all submissions were reviewed by at least three program committee members whose identity was not revealed to any of the authors. The reviewers did not review papers for which they had a conflict of interest. The organizers were excluded by the reviewer selection process when in direct or indirect conflict of interest. Out of the 8 full paper submissions, 6 full papers were accepted to be included in the workshops proceedings.

The workshop dedicates most of its program to discussion among the attendees. After a keynote and short presentations and discussions of each paper, facilitated working sessions will focus on the most interesting topics, as identified by the attendees. Last, but not least, we are most grateful to all the authors for their submissions to GREENS 2018, and to the invited Program Committee members for their valuable time and effort in reviewing the submitted papers. We also want to extend our gratitude to the organizers of ICSE 2018 for the facilities regarding the logistics of the workshop and the publication of the proceedings.

Ivano Malavolta, Rick Kazman, and João Saraiva
GREENS 2018 Program Committee Chairs