Preface from the Organizers

Welcome to the 3th International Workshop on Measurement and Metrics for Green and Sustainable Software (MeGSuS 2016)!

The workshop aims to provide a forum for researchers and practitioners i) to discuss their current work on measurement practices for greening and making more sustainable software systems ii) to share experiences on metrics commonly used to assess/predict the greenness in the ICT industry (e.g. Data Centers, Embedded System Software) iii) to identify the main challenges and define a research agenda on the topic of Measurement and Metrics for Green and Sustainable Software.

It is backed by 2 previous workshops held in Rotterdam (MeGSuS 2014), and Cracow (MeGSuS 2015), both co-located with the IWSM-MENSURA conference. MeGSuS 2016 is held in Ciudad Real, Spain, co-located with the 10th International Symposium on Empirical Software Engineering and Measurement (ESEM).

This year a total of 7 papers were submitted to MeGSuS. Of the 7 papers submitted, 5 were accepted (71%). The authors of our submissions came from 6 different countries (Canada, France, Ireland, Italy, Russia, Spain). Each paper was peer-reviewed by three different members of our program committee.

We are fortunate to have 1 industrial keynote on "Green Indexes Used in CAST to Measure the Energy Consumption in Code", by Marco Bessi from CAST.

The program includes the presentation of 3 full papers, and 2 short papers. The accepted papers are described as follows:

1. "Indicators for Green in IT Audits: A Systematic Mapping Study" *(J. David Patón-Romero and Mario Piattini):* in this paper, authors present a systematic mapping study that aims to collect the current knowledge about Green in IT audits, in order to determine what are the most important characteristics in the development of an audit framework for Green in IT and especially the indicators used for this auditing.
2. "A Learning based approach for Green Software Measurements" (*Sarah Dahab*, *Stephane Maag*, *Alessandra Bagnato and Marcos Aurélio Almeida Da Silva*): in this paper, authors propose an automated solution based on continuous analysis of software "green" measurements, using at runtime a machine learning algorithm.
3. "An effort allocation method to optimal code sanitization for quality-aware energy efficiency improvement" (*Roberto Pietrantuono*, *Gabriella Carrozza*, *Stefano Russo and Marco Bessi*): in this paper, authors define a method to first predict the applications of a software system more likely to impact energy consumption, and then exploit the prediction for optimally scheduling the effort for code sanitization.
4. "Measuring Green Software Engineering In the MEASURE ITEA 3 Project" (*Alessandra Bagnato*, *Marcos Aurélio Almeida Da Silva*, *Antonin Abherve*, *Jérôme Rocheteau*, *Claire-Lise Pihery and Pierre Mabitt)*: this paper highlights the benefits within the Green Computing metrics measurement context from the MEASURE ITEA 3 project (Measuring Software Engineering) Project French cluster.
5. "How sustainable are model software artifacts in the context of Model Driven Software Engineering" (*Damiano Torre and Coral Calero*): in this work, authors present a first attempt at reshaping existing basic dimensions for software sustainability in terms of Model-Driven Software Engineering.

We hope that you will enjoy your stay at Ciudad Real and make the most of MeGSuS '16!

Workshop chairs
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