Message from the Chairs SERP4IoT 2019

SERP4IoT 2019, the first edition of the International Workshop on Software Engineering Research & Practices for the Internet of Things has taken place in Montreal, Canada, on May 27th. It was held in conjunction with the 41st ACM/IEEE International Conference on Software Engineering (ICSE 2019).

It is our objective to establish SERP4IoT as an annual venue gathering researchers, industrials, and practitioners to share their vision, experience, and opinion on how to address the challenges of, find solutions for, and share experiences with the development, release, and testing of robust software for IoT devices.

To date, there is no precise definition of what constitutes IoT, since it encompasses many different aspects of software design, development, evolution, deployment and operation, including success, longevity, growth, resilience, survival, diversity, sustainability, transparency, privacy, security, etc.

Software engineering is vital for IoT to design systems that are secure, interoperable, modifiable, and scalable. However, there is no a consensus of crucial questions like what are the best practices for developing projects for IoT, how to select the best architecture, which communications protocols are the most suitable, and what are the best practices in terms of security.

The technical program of the workshop includes presentations of 16 papers, contributed by 53 authors from 13 different countries. Each paper was reviewed by at least three Program Committee members. All papers were evaluated according to their relevance to the workshop, soundness, maturity and presentation quality. Accepted long and short papers of high quality were invited for presentation and inclusion in the workshop proceedings, published by IEEE Xplore Digital Library, while rest were invited for presentation and the internal proceedings only.

Different from a typical conference type workshop, SERP4IoT counted we several activities to foster participation of the assistants in a constructive manner. We had Beach Ball Buzz game, affinity mapping and card sorting for discussing existing issues and challenges on IoT, and closed with an open *Fishbowl* to allow each attendant to give their opinion in an interactive way.

We were very proud to host three invited keynotes by Enrique Alba (University of Málaga, Spain), Hausi A. Müller (University of Victoria, Canada), and Mathieux Bergeron (Kinova Robotics).

Topic-wise, we received diverse submissions investigating a wide range of software engineering issues and challenges for the IoT: such as end user programming models, software architecture for interoperability, model driven engineering techniques, security, reliability, and diverse applications of IoT to support a variety of domains like pisciculture, gaming, etc.

We would like to thank everyone who made the workshop come to life, including the authors, the Program Committee members and the ICSE 2019 Workshop Chairs. We were glad to have your presence in the workshop and hope to meet you again at a future SERP4IoT edition!

