

2nd Workshop on Fog Computing and the IoT

Fog-IoT 2020, April 21, 2020, Sydney, Australia

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■ Preface

The 2nd Workshop on Fog Computing and the IoT is arranged in conjunction with the CPS-IoT Week in 2020. It is intended as a forum for presenting and discussing recent developments and trends in Fog/Edge Computing that represent challenges and opportunities for CPS and IoT researchers and practitioners. Fog/Edge Computing is a novel and multidisciplinary topic, at the intersection of CPS, IoT and Cloud Computing, and we believe that it benefits from exposure and inputs from CPS and IoT researchers. However, Cloud Computing cannot provide the dependability and quality-of-service guarantees required for industrial applications. Our experience from the “European Training Network on Fog Computing for Robotics and Industrial Automation” (funding 15 PhD students) and the “Nordic University Hub on Industrial IoT” (with over 30 affiliated PhD students) is that the expertise of CPS and IoT researchers is essential to the development of future Fog Computing platforms. This year the workshop received 13 submissions out of which 10 were accepted for oral presentations. The topics of the accepted presentations include fog/edge and IoT aspects of scheduling, system architectures, control analysis, distributed data processing, real-time kernels, node discovery, telemetry, simulation, and machine learning. In addition the workshop has two invited presentations.

Anton Cervin
Yang Yang

March 5, 2020

Short biographies

Anton Cervin is an Associate Professor in Automatic Control at Lund University since 2007. He received the M. S. degree in Computer Science and Engineering and the Ph. D. degree in Automatic Control from Lund University in 1998 and 2003, respectively. Anton Cervin has done research in the intersection between automatic control and computer science for the past twenty years. Developing popular analysis tools such as TrueTime and Jitterbug, he has investigated the interplay between control performance, resource scheduling, and feedback mechanisms in real-time systems. The tools have an extensive user base in industry and academia, the research papers are highly cited, and four of his publications have received best paper awards. He has held a junior researcher grant and three individual project grants from the Swedish Research Council.

Yang Yang is a full professor at ShanghaiTech University, China, serving as the Executive Dean of School of Creativity and Art and the Co-Director of Shanghai Institute of Fog Computing Technology (SHIFT). Before joining ShanghaiTech University, he has held faculty positions at the Chinese University of Hong Kong, Brunel University (UK), University College London (UCL, UK), and SIMIT, CAS (China). His research interests include fog computing networks, service-oriented collaborative intelligence, wireless sensor networks, IoT applications, and advanced testbeds and experiments. He has published more than 200 papers in these research areas. He is a General Co-Chair of the IEEE DSP 2018 conference and a TPC Vice-Chair of the IEEE ICC 2019 conference. Yang is a Fellow of the IEEE.



