1st International Workshop on Cyber-Physical Social Systems for Sustainability: Preface

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Welcome to the 1st International Workshop on Cyber-Physical Social Systems for Sustainability (CPSS4Sus). The workshop is a forum for researchers and practitioners to discuss the challenges and opportunities brought by Cyber-Physical System (CPSS) to promote strong and fair communities. In particular, we are interested in how issues, such as social and health equity, community development, human rights and social justice can be integrated into the early development of CPS.

We received 3 submissions and all submissions were reviewed by at least four members of the Program Committee. During our workshop, we discussed two very interesting proposals. Ramalu and Törngren presented the paper Towards an Architectural Framework and Method for Realizing Trustworthy Complex Cyber-Physical Systems. The paper outlines a framework to facilitate the considerations of trustworthiness in CPS systems, exemplifying its application in two intelligent transportation systems use cases. Corte-Cornax, Lago and Roncancio presented the short paper Cyber Physical System and Environmental Issues: a Smart Home Case Study. Their work discusses how life-cycle analysis of physical devices and data can help CPS designers to converge into an equilibrium of utility, performance and minimal environmental impact.

After the presentations, we carried out discussions with experts on the field. We used the questions from the Sustainability Awareness Framework (SusAF) to reflect on how CPS may affect various concerns in the social and individual dimensions of sustainability. This discussion led to the identification of research questions for the CPSS4Sus community, which were further explored by the experts during the final panel on Challenges and Opportunities in Engineering CPSS for Sustainability.

We are grateful to the Program Committee* for their reviews and very valuable feedback, as well as to the experts who so generously shared their experience with us. We thank all the authors who submitted their work to CPSS4Sus'22 and we congratulate those whose papers appear in the final proceedings. We look forward to grow a community around this interesting and important topic and to see you again in the near future!

Best regards,
Isabel, Nelly and Leticia

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