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# IoTSenCity 2020 Program

## Welcome Note

## Keynote

*IoT on the Edge: Sensing and Computing in Urban Landscapes*, Prof. Giovanni Pau.....N/A

Coffee break

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- *Forecasting Crowd Distribution in Smart Cities* (Alket Cecaj, Marco Lippi, Marco Mamei, Franco Zambonelli).....1
- *Implementation of a Low-cost Weather Station Developed in Design-based Learning Framework* (Andrea Antonini, Luca Bini, Gabriele Rafanelli, Ilaria Cantini).....7
- *Optimizing the Energy Envelope in the Internet of Things using Predictive Cubic Splines* (Saibal Ghosh, Dharma P. Agrawal).....13
- *Design, Implementation, and Deployment of TempMesh: A Wireless Mesh Network to Aggregate River-Temperature Data* (Jingya Gao, Scott Burman, Gregory Pasternack, Nann Fangué, Dipak Ghosal).....19

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# IAUV 2020 Program

## Welcome Note

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- *UAVs Path Deviation Attacks: Survey and Research Challenges* (Francesco Betti Sorbelli, Mauro Conti, Cristina Maria Pinotti, Giulio Rigoni).....25
- *Velocity Obstacle Based Strategy for Multi-agent Collision Avoidance of Unmanned Aerial Vehicles* (Alexandre Lombard, Lilian Durand, Stéphane Galland).....31
- *Optimizing the Trajectory of Drones: Trade-off between Distance and Energy* (Igor Dias Da Silva, Christelle Caillouet).....37

### Keynote Talk

*Robotics Meet Wireless Communications: Opportunities and Challenges*, Prof. Yasamin Mostofi.....N/A

### Farewell

# IEEE STP-CPS Program

**Welcome Note**, Dr. Deepak Tosh

## **Keynote talk**

*Edge-based Machine Learning for Cyber Physical Systems*, Prof. Aniruddha Gokhale.....N/A

## **Technical Session 1: IoT and 5G Communication Security**

- *Secure IoT Device Architecture Using TrustZone* (Takayuki Sasaki, Koki Tomita, Yuto Hayaki, Seng Pei Liew, Norio Yamagaki).....43
- [Invited] *Realization of a Techno-Economic Controller Deployment Algorithm for 5G Networks using vSDN* (Deborsi Basu, Uttam Ghosh, Addanki Sankara Rao, Sachin Shetty).....N/A
- Birds-of-a-feather discussion

## **Technical Session 2: Security and Trust in Cyber-Physical Systems**

- *A Benchmark of Security Metrics in Cyber-Physical Systems* (Andreas Aigner, Abdelmajid Khelil).....49
- [Invited] *Towards Designing a Secure Blockchain-based Smart Internet of Vehicle Architecture* (Debashis Das, Uttam Ghosh, Sourav Banerjee, Pushpita Chatterjee, Utpal Biswas).....N/A
- [Invited] *Blockchain-based Resource Management System for Disaster Relief and Response* (Vinayak Bhat, H. P. Pranaay, S. Mini, Deepak Tosh).....N/A
- [Invited] *Intra Cluster based Energy Efficient PSO-GA Routing Protocol in WSN* (Sowjanya Ramisetty, Kavita, Sahil Verma, Pushpita Chatterjee, Uttam Ghosh).....N/A

**Farewell**