

IEEE Sensors Council Summer School on "Intelligent Computing on Sensors IoT"

Date: August 29-30, 2020

Hybrid Event: Virtual and at the National Sun Yat-sen University (NSYSU), Taiwan

Host: Professor Chun-Wei Tsai, NSYSU

Website: https://ieee-sc-summer-school.cse.nsysu.edu.tw/

The primary focus of 2020 IEEE Sensors Council's Summer School includes smart city, intelligent computing and applications of internet of things.

Key Statistics

744 registrants from 21 countries including Algeria, Canada, Canada, China, Spain, France, India, Kerala, Luxembourg, Morocco, Nepal, Oman, Pakistan, Portugal, Saudi Arabia, Switzerland, Taiwan, UAE, Ukraine, United Kingdom, and United States

- > 5% were students, 25% faculty and 15% researchers
- Education Level: 33% PhD, 25% master's degree, 40% bachelor's degree
- The maximum number of concurrent online participants was 347

Marketing

The strategic marketing of the event included an e-notice to all IEEE members of India and promotion efforts by the Taipei Section Sensors Council Chapter, and announcement to COMSOC technical groups. These efforts contributed to the successful online participation.

Additional photos from the event may be found <u>here</u>.









Professional Talks and Presentations

"IoT Applications on Smart City: The IoT talk Approach" by Prof. Yi-Bing Lin, *National* Chiao Tung University

"A New Flexible Photoplethysmography (PPG) Sensor Patch for Continuous Measurement of Blood Flow Volume and Pressure based on AI algorithms" by Prof. Paul C.-P. Chao, National Chiao Tung University

"PigTalk: An Al-based IoT Platform for Piglet Crushing Mitigation" by Prof. Whai-En Chen, National Ilan University

"Inertial Sensor Based Wearable Devices on Healthcare" by Prof. Pau-Choo Chung, National Cheng Kung University



"Deep Learning and Federated Learning for Non-Intrusive Appliance Load Monitoring (NIALM)" by Prof. Huan Chen, National Chung Hsing University

"Data Distillation at the Edge: Local Differential Privacy Obfuscation for IoT Data Analytics" by Prof. Chia-Mu Yu, *National* Chiao Tung University

"A Fuzzy-Based Real-Time Auto-Scaling Mechanism for IoT Applications" by Prof. Fan-Hsun Tseng, *National Taiwan Normal University*

"Charging Planning of Wireless Rechargeable Sensor Networks" by Prof. Hsin-Hung Cho, *National Ilan University*



Live Streaming

The live streaming was hosted the <u>Sensors Council's YouTube channel</u> and on <u>WebEx</u>. In two days, we observed impressive traffic with over 500 view hours out of 3,100 views on the YouTube Channel. The recorded lectures are available on the Council's YouTube channel.





Sponsorship

This Summer School was technically supported by IEEE, IEEE Sensors Council, IEEE Taipei Section, IEEE Sensors Council Taipei Chapter, Taiwan Association of Cloud Computing, Intelligent Center for Health Industry Technology Development and Professional Cultivation, and Library and Information Center of Chia-Nan University of Pharmacy and Science.

It was financially sponsored by IEEE Sensors Council, Taiwan Association of Cloud Computing, Intelligent Center for Health Industry Technology Development and Professional Cultivation, and Library and Information Center of Chia-Nan University of Pharmacy and Science.

Host the Next Sensors Council Summer School

The Sensors Council is soliciting proposals for organizing Summer/Winter/Seasonal School focused on a Sensors theme. If you are interested in organizing one at your location, please send your proposal to the Education Activity Chair, Dr. Chonggang Wang at drchongwang@gmail.com with a copy to Brooke Johnson at bjohnson@conferencecatalysts.com.

