Department of Computer Science and Information Engineering

Dependable Networked Cyber-Physical Systems

Our research group works in the area of networked cyber-physical systems (CPS), with a focus on real-time, fault-tolerant, energy-efficient, application-oriented systems. We has been exploring timely, reliable, and sustainable CPS architectures for Industrial Internet-of-Things and smart campus applications.

Find us at https://wangc86.github.io/

Techniques used in study

Cyber-physical codesign
Applied real-time systems analysis
Middleware design and implementation

Chao Wang, Assistant Professor
Department of Computer Science and Information Engineering,
National Taiwan Normal University
cw@ntnu.edu.tw

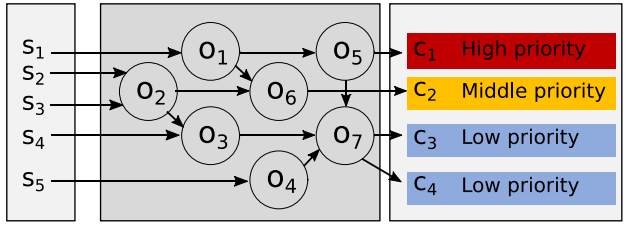
Background:

PhD in Computer Science,
Washington University in St. Louis, MO, USA

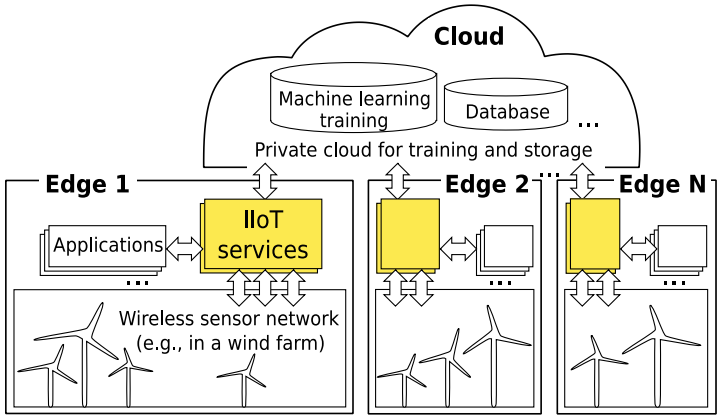
Funding:

Ministry of Science and Technology, Taiwan
National Taiwan Normal University

Real-Time Cyber-Physical Event Processing



Real-Time Reliable Edge Computing for Industrial Internet of Things



Publications

- Chao Wang, Christopher Gill, and Chenyang Lu, "FRAME: Fault Tolerant and Real-Time Messaging for Edge Computing," in 2019 IEEE 39th International Conference on Distributed Computing Systems (ICDCS), 2019, pp. 976-985
- Chao Wang, Christopher Gill, and Chenyang Lu, "Real-Time Middleware for Cyber-Physical Event Processing," ACM Transactions on Cyber-Physical Systems, vol. 3, no. 3, Article 29 (August 2019), 25 pages.