Department of Computer Science and Information Engineering

Networked Cyber-Physical Systems Laboratory

The Networked Cyber-Physical Systems Laboratory (NCL) was founded in 2019 at National Taiwan Normal University. At NCL, we study how computing systems interact with physical environments. In particular, we design and implement computing, sensing, and actuating systems that are real-time, fault-tolerant, and energy-efficient. We has been exploring timely, dependable, and sustainable cyber-physical infrastructures for Industrial Internet-of-Things (IIoT) and smart campus applications.

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

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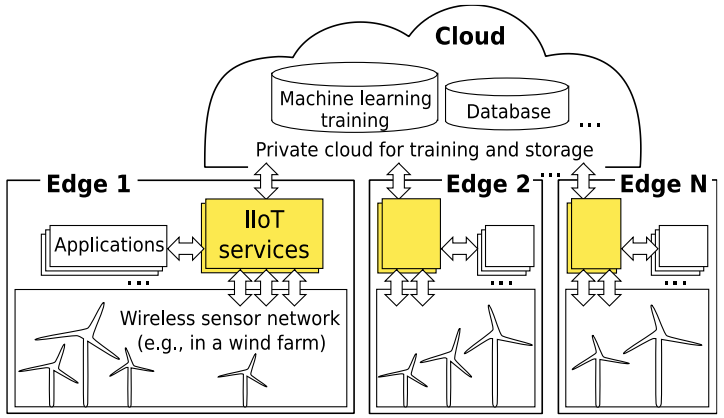
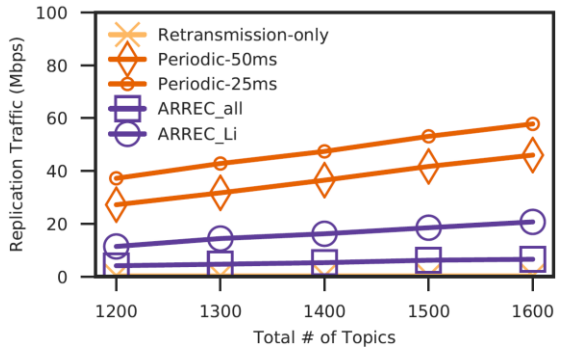
Research Interests:
Cyber-Physical Systems
Real-Time Systems
Internet of Things
Fault-Tolerant Computing



Industrial Internet-of-Things Architecture (ICDCS 2019 paper)



Bandwidth-Efficient Message Replication (IoTDI 2020 paper)

Publications

- Chao Wang, Christopher Gill, and Chenyang Lu, "Adaptive Data Replication in Real-Time Reliable Edge Computing for Internet of Things," in ACM/IEEE 5th Conference on Internet of Things Design and Implementation (IoTDI), 2020
- Chao Wang, Christopher Gill, and Chenyang Lu, "FRAME: Fault Tolerant and Real-Time Messaging for Edge Computing," in IEEE 39th International Conference on Distributed Computing Systems (ICDCS), 2019, pp. 976-985