

Ph.D. Opening in IoT/CPS Research

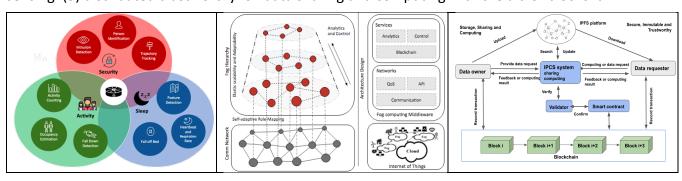
Sensorweb Research Laboratory
College of Engineering

Principal Investigator: Dr. Wenzhan Song

https://sensorweb.engr.uga.edu/

Research Topic: IoT/CPS Time-series Data Analytics

A Ph.D. research assistantship position is available in the research area of IoT/CPS data analytics and blockchain. The candidate will join the Sensorweb Research Laboratory to create innovative IoT/CPS time-series data **analytics** methodologies and **blockchain** systems for health and security monitoring applications. The lab currently focuses on three applications: (1) cyber-physical security monitoring by auditing the cyber and electrical signals in electrical infrastructure and manufacturing systems; (2) human and animal health and safety health (especially vital signs) and activity monitoring via contactless sensing. (3) distributed trustworthy IoT data sharing and computing with the aid of blockchain.



About the lab and faculty advisor:

The lab is in Boyd 128 with 800 sqft space and currently has 5 PhD and 2 MS students. The faculty advisor Dr. WenZhan Song is the Endowed Chair Professor of Computer Engineering and Founding Director of Center for Cyber-Physical Systems. He is a world leading expert on IoT/CPS analytics & security and received numerous important honors and awards, including NSF CAREER award 2010, Mark Weiser Best Paper Award 2020, and multiple Research Excellence awards. He works closely with government and industry partners on technology innovation and commercialization.

Relevant Publications:

- Clemente, Song, et al. "Helena: Real-time contact-free monitoring of sleep activities and events around the bed." 2020 IEEE International Conference on Pervasive Computing and Communications (PerCom). IEEE, 2020. (Best Paper Award)
- Li, Song, et al. "Online distributed IoT security monitoring with multidimensional streaming big data." IEEE internet of things journal 7.5 (2019): 4387-4394.
- Li, Song, et al. Enhanced Cyber-physical Security in Internet of Things through Energy Auditing, IEEE Internet of Things Journal, 2019.

Desired Background and Expertise:

Prospective students with background in computer science and engineering are encouraged to apply. Previous research experience as undergraduate or Masters student in areas related to artificial intelligence and distributed systems is preferred. High GPA and strong references letters will boost chances.

Application Procedure:

Interested students must apply to the **Ph.D. in Engineering (Electrical and Computer Engineering Emphasis)** in the college of engineering. More information about the application procedure, eligibility requirements, deadlines and assistantships can be found at the graduate admission website.