



Electrical and Computer Engineering

Zhengxiong Li

Ph.D. candidate, Department of Computer Science and Engineering at SUNY Buffalo



Title:

"Cyber-physical Spectrum Computing in the IoT Era: Security and Beyond"

Tuesday, March 3 2:00 - 3:00 p.m.

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Abstract

Currently, the Internet of Things (IoT) is rapidly growing. At the same time, the security and privacy threats towards emerging IoT (cyber-physical) systems are also increasing, which could lead to a series of catastrophic results on both enterprises and individuals. However, due to the complexity of the surrounding occlusion, unavoidable variance in signal's scaling, and privacy-preserving and green requirements, existing solutions yield unsatisfactory performance. In this talk, I will present our recent work to tackle these challenges with the method of a brand-new physical-based data-driven approach to understand the world and reach unmet needs from people through cyber-physical systems and a new theoretical framework. At last, I will conclude the talk with the latest thoughts towards the future of cybersecurity and IoT.

Biography

Zhengxiong Li is a Ph.D. candidate from the Department of Computer Science and Engineering at SUNY Buffalo. His research interests mainly focus on the Internet-of-Things, Cybersecurity, and Emerging Technologies and Applications (e.g., Smart Health) within ACM SIGMOBILE and SIGSAC, under the vision of understanding the world and reaching unmet needs from people with practical cyber-physical systems. He is a recipient of the Best Paper Award (ACM SenSys 2019), Best Paper Runner-up Award (ACM SenSys 2018), Dean's Graduate Achievement Award (UB SEAS 2018), and Best Graduate Research Award (UB CSE 2018). His work has been covered by major media outlets, including VICE, CNET, ZDNet, and ACM News.