

THE DEPARTMENT OF COMPUTER SCIENCE & THE COMPUTER SCIENCE GRADUATE STUDENT ORGANIZATION (GSOCS) PRESENT

INVITED SPEAKER SERIES

co-sponsored with GSO and partially paid for by student activity fees

Professor Chenyang Lu Washington University in St. Louis

Friday, October 20th at 12 noon, Fine Arts 258

Dependable Internet of Things

Abstract: IoT-driven control underpins many IoT applications in industries and smart cities. In contrast to best-effort IoT often found in consumer markets, there remain daunting challenges to develop IoT systems that not only monitor but also control physical systems in a *dependable* fashion. We will highlight the dependability challenges caused by communication delays, data loss and resource constraints of IoT. We will further discuss cyber-physical co-design as a fundamental approach to achieve dependable control based on IoT.

Bio: <u>Chenyang Lu</u> is the Fullgraf Professor in the Department of Computer Science and Engineering at Washington University in St. Louis. His research interests include Internet of Things, real-time systems, and cyber-physical systems. He is Editor-in-Chief of <u>ACM</u> <u>Transactions on Sensor Networks</u> and chaired premier conferences such as ACM SenSys, IEEE RTSS, ACM/IEEE ICCPS and ACM/IEEE IoTDI'17. He is the author and co-author of over 150 research papers <u>with over 17,000 citations and an h-index of 56</u>. He received the Ph.D. degree from University of Virginia in 2001. He is a Fellow of IEEE.