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Research Interests

Wireless Networks, Internet of Things, Cyber-Physical Systems

Professional Experience

Instructor, Faculty of Information and Communication Technology, Mahidol University,
2010 - current

Education

Doctor of Philosophy in Computer Science
Washington University in Saint Louis, May 2019

Master of Science in Computer Science
Washington University in Saint Louis, May 2013

Bachelor of Science in Information and Communication Technology
Mahidol University, April 2010

Selected Honors

Scholarship for Mahidol University Lecturer Development, Mahidol University, 2013

Scholarship for Pursuing BS in Information and Communication Technology, Mahidol
University, 2006

Publication Statistics

Journal Articles: 3

Conference Papers: 8

Citations: Google Scholar: 307 with h-index of 8

Publications

R. Brummet, D. Gunatilaka, D. Vyas, O. Chipara and C. Lu, **A Flexible Retransmission Policy For Industrial Wireless Sensor Actuator Networks**, IEEE International Conference on Industrial Internet (ICII'18), October 2018.

Y. Ma, D. Gunatilaka, B. Li, H. Gonzalez and C. Lu, **Holistic Cyber-Physical Management for Dependable Wireless Control Systems**, ACM Transactions on Cyber-Physical Systems, Special Issue on Dependability in Cyber Physical Systems and Applications, 3(1), Article No. 3, August 2018.

D. Gunatilaka and C. Lu, **Conservative Channel Reuse in Real-Time Industrial Wireless Sensor-Actuator Networks**, IEEE International Conference on Distributed Computing Systems (ICDCS'18), July 2018.

C. Wu, D. Gunatilaka, M. Sha and C. Lu, **Real-Time Wireless Routing for Industrial Internet of Things**, ACM/IEEE International Conference on Internet of Things Design and Implementation (IoTDI'18), April 2018.

D. Gunatilaka*, M. Sha*, C. Wu and C. Lu, **Empirical Study and Enhancements of Industrial Wireless Sensor-Actuator Network Protocols**, IEEE Internet of Things Journal, June, 2017. (* co-first author)

D. Gunatilaka, M. Sha and C. Lu, **Impacts of Channel Selection on Industrial Wireless Sensor- Actuator Networks**, IEEE International Conference on Computer Communications (INFOCOM'17), May 2017.

C. Lu, A. Saifullah, B. Li, M. Sha, H. Gonzalez, D. Gunatilaka, C. Wu, L. Nie and Y. Chen, **Real-Time Wireless Sensor-Actuator Networks for Industrial Cyber-Physical Systems, Special Issue on Industrial Cyber-Physical Systems**, Proceedings of the IEEE, 104(5): 1013- 1024, May 2016.

C. Wu, D. Gunatilaka, A. Saifullah, M. Sha, P.B. Tiwari, C. Lu and Y. Chen, **Maximizing Network Lifetime of WirelessHART Networks under Graph Routing**, IEEE International Conference on Internet-of-Things Design and Implementation (IoTDI'16), April 2016.

A. Saifullah, D. Gunatilaka, P. Tiwari, M. Sha, C. Lu, B. Li, C. Wu and Y. Chen, **Schedulability Analysis under Graph Routing in WirelessHART Networks**, IEEE Real-Time Systems Symposium (RTSS'15), December 2015.

M. Sha*, D. Gunatilaka*, C. Wu and C. Lu, **Implementation and Experimentation of Industrial Wireless Sensor-Actuator Network Protocols**, European Conference on Wireless Sensor Networks (EWSN'15), February 2015. (*co-first author)

C. Wu, M. Sha, D. Gunatilaka, A. Saifullah, C. Lu and Y. Chen, **Analysis of EDF Scheduling for Wireless Sensor-Actuator Networks**, ACM/IEEE International Symposium on Quality of Service (IWQoS'14), May 2014.