Cyber-Physical Systems (CPS) Seminar Series

Title: Addressing Architecture Challenges for Real-Time Vision Processing in Automated Driving Systems

Speaker: Dr. Shige Wang, Staff Researcher, General Motors

Abstract: Vision processing is a key component in automated driving systems. Most vision processing algorithms today, however, are not designed for safety-critical real-time applications. Considering these algorithms are typically both data- and computation-intensive and require advanced hardware platform, applying them to automated driving brings new architecture challenges. In this talk, I will discuss some architecture challenges and potential solutions to support the vision processing for real-time vehicle controls.

Biography: Dr. Shige Wang is a staff researcher at GM Global R&D. He has been working on many projects related to system modeling and model-based system design, multicore software architecture for powertrain controls and active safety, and processor thermal management for ECUs. His recent research focuses on heterogeneous computing and parallel processing for automated driving systems.

Date: Monday, April 09, 2018
Time: 3:30PM-4:45PM
Location: King 312