

FALL 2017

Computer Science Special Topics

CS 491-4 / CS 591-4

Tuesday & Thursday

9:35-10:50 AM

EGRA 208

Instructor – Dr. Henry Hexmoor

Cyber Physical Systems: Internet of Things

The goal of this course is to introduce and develop an understanding of the computing and communication for Internet of Things as a subset of [Cyber Physical systems](#). Connectivity among devices in our daily lives such as WiFi-enabled thermostats, the smart power grid, and driverless cars is ushering in an era of sociality that transcend human social networks to machine to machine networks. Lecture material in the first half of course will cover key concepts from wireless and sensor networks as well as control theory and temporal logics. The second half of class will be run as a seminar with presentations of contemporary technical issues. Team project is a key part of this course. Each project will demonstrate a salient application of interest to students including sensor/actuator apps and ambient environments.

Textbooks: R. Alur, 2015. Principles of Cyber-Physical Systems, MIT Press.