Designing for the Internet of Things (48-675)

Thermostats, locks, power sockets, and lights are all being imbued with ‘smarts’ making them increasingly aware and responsive to their environment and users. This course will chart the emergence of the now ‘connected world’ to explore the possibilities for future products and connected spaces with the Internet of Things. This introductory, hands-on course invites students to creating connected products without any knowledge of programming, electronics or systems. Students will be introduced to interactive connected technologies through a series of hands on exercises, collaborative projects, in-depth discussions, and instructor led tutorials. Topics explored will include awareness, real-time sensing and communication, embedded intelligence, and designing experiences for the internet of things. By the end of this course, students will be familiar with the core skills, the considerations involved and design process required to build a connected system. Students will also apply this learning in collaborative groups to realize a prototype connected device.