CIS 700/002 : Special Topics : Security of Embedded Systems, Cyber-Physical Systems, and Internet-of-Things

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Today's Class

- Final (final) week of tool demos.
- SQLmap
 - Hung
- Cocaine Noodles: Exploiting the Gap between Human and Machine Speech Recognition
 - Swathi

• BREAK

- WALNUT: Waging Doubt on the Integrity of MEMS Accelerometers with Acoustic Injection Attacks
 - Thejas
- Unmanned Aircraft Capture and Control via GPS Spoofing
 - Nikheel





Final Project

- Use tools and insight to assess the security of a commercial device
 - What information is made available?
 - How could this information be exploited?
 - How can these vulnerabilities be patched.
- Has anyone not chosen a device?
- Description on course website (under projects)
 - April 7th: Mid-term
 - April 28th : Final Demo





Next Week

- Defensive Technologies for Embedded Systems / CPS / IoT
- A survey of secure middleware for the Internet of Things
 Hyo Jin
- Secure MQTT for Internet of Things (IoT)
 - Sangdon
- Secure embedded systems
 - Hitali



