CS 6393: Cyber Security Models and Systems
CS 4593: Cyber Security Models and Systems (cross-listed)

Project Guidelines

Ravi Sandhu

Spring 2019
“My dear, here we must run as fast as we can, just to stay in place. And if you wish to go anywhere you must run twice as fast as that.”

— Lewis Carroll, Alice in Wonderland
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2 Part Project

- Impactful Attack or Vulnerability
- Emerging Technology Challenges
Impactful Attack or Vulnerability

- Examples
  - Heartbleed bug 2014
  - Meltdown bug 2018
  - Spectre bug 2018
  - Mirai botnet 2016
  - Equifax data breach 2017
  - Stuxnet 2010
  - Melissa virus 1999
  - .....

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Emerging Technology Challenges

- **Examples**
  - Cloud computing
  - Internet of things
  - Social media
  - Blockchain
  - Wireless 5g
  - Quantum computing
  - .....
2 Part Project

- **Impactful Attack or Vulnerability**
  - No duplication
  - First come first serve

- **Emerging Technology Challenges**
  - Duplication ok
  - Teams must coordinate (with my help) to differentiate duplicate topics
Project Structure

- Individual or 2-person team (self-organized)
- 40 minute in-class presentation, 3 per class meeting
  - Pick either one as major
  - 20 minute on bigger task
  - 10 minute on smaller task
  - 10 minute class discussion
  - Both team members must present
Project Grade

- 3 aspects
  - Evidence of Effort and Quality of presentation
  - Content Completeness and Relevance
  - Content Originality
- One grade for team
- Additional guidelines will be forthcoming
Time line

- Project teams and topics finalized by Feb 8th
- Presentation slots assigned first-come first serve

Protocol

- Communicate to me via ravi.utsa@gmail.com
- I will post a list of teams and topics as I get them (more or less)