# Lecture 1: Introduction to CS/ECE 3992 Sr. Project Design

Dr. Tsung-Wei Huang
Department of Electrical and Computer Engineering
University of Utah, Salt Lake City, UT

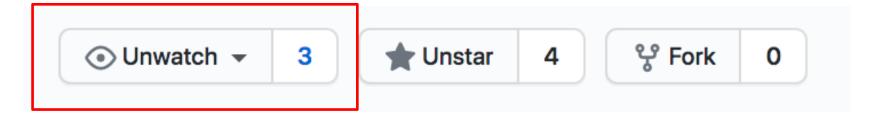


## **Class Logistics**

**1** Staff Instructor: Dr. Tsung-Wei Huang (tsungwei.huang@utah.edu) ☐ TA: Yasin Zamani (yasin.zamani@gmail.com) ☐ Main class ■ 11:50 AM – 13:10 PM Wed/Fri (excluding holiday) ■ In person + individual project meeting ☐ Office hour ■ By appointment ■ **Web:** https://github.com/tsung-wei-huang/cs3992 Announcement and assignment in Canvas

## Watch the GitHub Repository

- □ <a href="https://github.com/tsung-wei-huang/cs1410-40">https://github.com/tsung-wei-huang/cs1410-40</a>
- ☐ You can receive all updates
  - ☐ New homework
  - New check-in data
  - ☐ New updates
  - ☐ ... (please register for a GitHub account)



☐ You will need to turn in assignments via Canvas!

## **Scoring**

#### ☐ Total 100 points

- Engineering Evaluation (10%)
- Resume and Elevator Pitch (10%)
- Proposal PDF file (30%)
- Project Website (15%)
- Technical Open House (10%)
- Proposal Presentation (15%)
- Class Participation (10%)
- ☐ Recommended textbook
  - ☐ William Strunk and E B White, *Elements of Style*

## Please Wear Your MASK in Class





## **Class Philosophy**

- ☐ Focus on team work
  - ☐ You need to form a team of 3-4 members
    - Write a good resume and build your website
    - Elevator pitch
  - Work on a real project that matters
    - Why is it important?
    - Why should I care?
  - ☐ Write a proposal for what you plan to do in CS/ECE 4992
    - A contract between you and me
    - My role is "supervisor"
  - ☐ Collaborate, collaborate, collaborate, ...

#### To this end ...

- ☐ Class is organized in three parts
  - ☐ Lectures
  - ☐ Teaming
  - ☐ Project meeting

#### Let's Look from the Outcome

- ☐ Projects from the previous semesters
  - □ https://github.com/tsung-wei-huang/cs3992

## **Assignment 1: Engineering Evaluation**

- ☐ This assignment lets you understand the course goal
- □ Part 1
  - ☐ Identify a daily problem to improve
  - ☐ Provide a solution as a "computer engineer"
- □ Part 2
  - ☐ Watch the videos of previous projects
  - ☐ Write your comments for three projects
- ☐ Due 11:59 PM on 1/27

## **Assignment 2: Resume and Pitch**

☐ This assignment lets others know about you □ Part 1 ☐ Prepare you resume and a personal webpage □ Part 2 ☐ Stand up to the stage and give a pitch ■ What's special about yourself? ☐ Why do you need me to be in your team? ☐ In class pitch ☐ Resume due 11:59 PM on 2/5

## **Assignment 3: Project Website**

Create a project website to include the following: ☐ Project title Team members Project abstract (what's in it and why is it important?) Proposed methods ☐ Timetable of project-related activities **☐** V1 due 11:59 PM on 2/26 **☐** V2 due 11:59 PM on 3/12 **☐** V3 due 11:59 PM on 3/26

### **Assignment 4: Engineering Open House**

- ☐ Attend one session of EE technical open house
- ☐ Write a report on selected projects
  - What's unique about the project?
  - ☐ What's important in the project?
  - ☐ What's solved by the project?
- ☐ Due: TBD

## **Assignment 5: Final Proposal**

- ☐ 5-10 pages proposal to identify:
  - ☐ Identify the key idea of the project
  - ☐ Identify the proposed methods in details
    - How are you going to implement the idea?
    - How are you going to mitigate the risk?
    - How are you going to demo the result
  - ☐ Analyze the potential risk is of paramount importance!
- ☐ Due: 11:59 PM 4/23