

Syllabus and Projects

CSCI 5040: Professional Master's Project (1 of 2)

Lecture 3

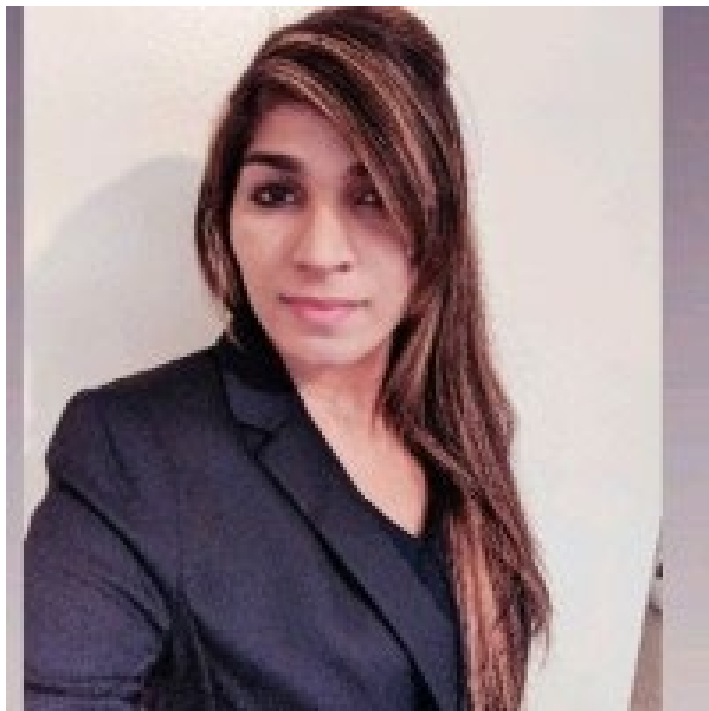
Learning Objectives

- Students will be able to...
- Understand the class mechanics
- Consider the class projects

Your Class Staff for Fall 2020

Preethi Vijai Lilly

GSS



Preethi and I are here for you. You can ask questions about anything class related, ask for help with projects, etc. Don't hesitate to reach out if you need a hand.

COVID Impacts on Class

- Normally, I enjoy being on campus for class and for seeing you in person
- For Fall, I will not teach or hold office hours this semester in person – I will be very available by Zoom or Piazza or e-mail
 - If we must meet in person, we'll arrange for a safe space
- Preethi will largely interact with you remotely as well
- Right now the only reason to attend class in person is if you need to for residency or visa requirements
 - I will publish a list soon of which students can come to class on which days
- I will make allowances for impacts to submissions or participation due to COVID or other personal issues, just contact me as soon as possible
 - Note that you do NOT have to disclose the nature of any health issue
- Many of you will likely be interacting with your teammates over Zoom for projects
 - It can be more difficult than colocated teams but... it's a good skill to develop and it's a common situation in software development...
 - If you have communication issues for project work, see me or the class staff as soon as possible for help
- Be smart, careful, and safe

First Time!

- This is the first PMP class I've put together
- It's largely based in structure on Alan Paradise's senior CS capstone
- Like Alan's class, the main focus is going to be the projects
 - We'll do some lectures (about ½ time) in 5040 (almost none in 5050)
 - We'll have guest speakers about every other week
 - You're expected to put in about 7-10 hours a week on project work in 5040 (14 hours a week in 5050)
 - Adds up to about 500 hours in 5040, 1000 hours in 5050 for a 5 person team
- I will undoubtedly get things wrong this semester (and next)
- Be patient, ask questions, make suggestions
- If we both work to make this a good experience, it will be
- Your input will make this and follow-on classes even better

Projects – General

- The projects for the PMP class have been provided over the summer by industry partners
- In all cases, these sponsors will own the IP of the project work you're providing for them
- We will discuss as part of the projects, what level of your work for the sponsor you will be allowed to share with others outside of the sponsor and the class
- In all cases, these sponsor's projects are development that matters to these companies; make sure the work matters to you

Projects – Specific

- Carrier/Edwards – Fire System Application – UX, Computer Graphics
- Carrier/Edwards – Simulation of Fire Network Communications – Comm Protocols, Simulation
- Double Helix – Analysis Tools for Optics – Applied Math, C++, Matlab, Parallel Processing
- Inovonics – Synthesis of sensor data for Sr. Living monitoring – AI, ML, Data Science
- Status Solutions – Predictor for Loneliness, PTSD, Suicide Prevention – AI, ML, Azure
- Status Solutions – Voice/Chatbot integration for Situational Awareness system – Audio/Voice, API, DB
- Trimble – Crewsite construction site monitor – AWS, IoT, Wireless protocols, Audio/Voice
- Inspiring Service – Web application for Community Services – Web, DB, API, UX
- Helping – Web application for integration of Public Services – Web, DB, API, UX

Project Deliverables and Grading

50 points (5%) Attendance – Team meetings, Speakers

50 points (5%) Participation – Piazza topic discussions

100 points (10%) Midterm

100 points (10%) Final

200 points (20%) Assessments (Instructor, Peers, GSS, Sponsor)

500 points (50%) Project Deliverables – Status updates, charter, project brief, WBS, requirements, design sprint results, final presentation (Subject to change based on sponsor input)

Extra credit (tbd)

Similar grading in 2nd semester

Syllabus

You can find the Syllabus on the class Canvas site under Syllabus and Files

I'm going to walk you through the highlights, lets review it together...

Assignment: Resume or Info Sheet

- By Monday, please submit on Canvas
 - A PDF resume or CV with name & e-mail
- Or
 - A PDF document with the following:
 - Name
 - E-mail
 - Years of experience (since Bachelor's)
 - Areas of expertise (languages, skills)
 - Other professional information
- This information will be provided to sponsors prior to the project fairs
- Worth 10 points for on-time delivery, 5 points (over four hours late)

Next Steps

- Make sure you sign up for Piazza and Canvas notifications
- Turn in your resume/CV/Info Sheet
- Look for this week's topic question on Piazza for your response
- Thursday: Project Management for PMP, more on projects and the Project Fair, teams, and project selections
- Prepare for project fair, review the project book
- Week of 8/31 – Project Fair during class periods – meet and talk to sponsors, select projects of interest, must attend both sections
- Week of 9/7 – Project assignments & charters; first speakers – Amy Richards (Industry Liaison) and Rae Stout (Engineering Career Services), must attend speaker's visit on Thursday
- Project rhythms and status reporting will start 9/14