

Session 1 (1/8/26):

Specific pieces of advice:

- Could think about a coop?
- Have to try to get leadership experience (club/org, or with side hustle experience)
- If you're socially introverted, just set metrics in terms of socializing:
  - Go to professor's office hours once every two weeks
  - Setup 1on1 discussions with robotics club and wind turbine energy club leadership
  - Volunteer to assists in a lab or with research with a professor
- Schedule regular visits to the career center/student resources center
- Schedule 1on1s with your professor's graduate students
- Schedule 1on1s with working professionals in your network
- See if you can join SI as a leader for old classes you took – or at least attend SI sessions to meet other students and see what it's like to be an SI leader so you can be one next semester or year.

Campus Groups:

- IEEE (Institute of Electrical and Electronics Engineers) Student branch
- ECpE Departmental Peer Mentor: lead a group of first year students, facilitating their transition into the rigorous EE curriculum.
- Team PrISUm (Solar Car) team
- Cyclone Rocketry
- Make-to-Innovate (M2I) Project Lead: M2I is a program where you can lead specific, credit-bearing research and development projects (often aerospace or robotics related)
- Solar Decathlon team
- Emerging Leaders in Engineering (ELE): this student org is dedicated exclusively to "soft skills." Workshops on communication, ethics, team building.
- Engineering Career Fair Student Operations
- Vermeer Leaders Program
- LEAD Learning Community Mentor: program hires upperclassmen to mentor students from underrepresented backgrounds in STEM.
- Engineering Ambassador & Mentor Program (TEAM): lead tours for prospective students and families
- Society of Women Engineers

Add Core GPA to resume if it's higher than overall GPA

## Technical Projects

### Cat Detection and Automated Door System

- Built a cat detection system using OpenCV and Raspberry Pi.
- Enhanced the system into an automated door using sensors and actuators.

Accomplishment + Metric + How + Impact = Value

Rewritten: I wrote Python code (60% of project code) and integrated code from my team member to build a cat detection system using a camera and a Raspberry Pi (with OpenCV database) and tested over 3 iteration cycles, later adding enhancements to the system for an automated door using sensors and actuators.

Amal's part: coding mostly was her, other team member did some code, they would meet twice a week and do integration and see what parts were working and not working and iterate.

Taught me how to use the open libraries

### Small Robot Development (ongoing project)

- Designed 3D models using Shapr3D.
- Developed circuits and integrated them with a Raspberry Pi.
- Programmed functionalities using Python.

Rewritten: Designed and developed a small humanoid robot (~1/6 real human size) that can move at a speed of X, and can converse (through ChatGPT integration), add METRICS.

Going to use raspberry pi camera to detect objects

Can move

Can talk (if incorporate ChatGPT)

Independent project with Raspberry Pi outside of school.