Aashrith Beesabathuni aashrith.b24@berkeley.edu (321) 347-1237

EDUCATION

University of California, Berkeley (3.8 GPA) **Expected Graduation: May 2025**

B.S Electrical Engineering and Computer Science, B.S Mechanical Engineering

- **Relevant Coursework**: Microelectronic Devices and Circuits, Designing Information Devices and Systems, Internet of Things, Java Data Structures, Computer Architecture, Manufacturing and Design Communication,
- **Activities:** Neurotech @ Berkeley, Engineering Solutions @ Berkeley, Cal Hiking and Outdoor Society

SKILLS

- **Design Softwares:** Solidworks | KiCAD | Autodesk Inventor | Fusion | Onshape | FEA (Solidworks + Inventor)
- **Coding Softwares:** Python (Libraries: numpy, matplotlib, openCV) | Java | Arduino IDE | ROS | C++
- **Manufacturing**: CNC Router | Lathe | Laser Cutter | SLA + FDM 3D Printer | Waterjet

WORK EXPERIENCE

MOLEX **August 2024- Present**

Automation Engineer Intern *Carlsbad, CA*

- Tested and developed Fiber Array aligner machines, utilizing serial communication protocols to automate fiber array process within 4 micron precision, enabling a ramp up in production for 200k trans-receivers modules a month
- Improved Python backend to automate aligning process, interfacing with existing GUI in labview used by 200+ workers
- Wrote Powershell scripts to efficiently download and install necessary software on machines, further automating workflow

Designing Information Devices and Systems II **January 2024 – Present**

Teaching Assistant *Berkeley, CA*

- Led lab sections, reinforcing concepts of circuitry, system stability and linear algebra to 400+ students across all ages
- Facilitated hands on learning for the creation of students' voice controlled car, debugging issue related to analog circuit creation, python scripts for voice recognition, and control system integration over the course of a full semester
- Reviewed and verified course material, ensuring working Jupyter Notebook, Lab equipment, and circuit components

Engineering Solutions @ Berkeley **January 2023 – December 2023**

Project Manager *San Francisco, CA*

- Led team of 5 engineers to develop high speed cable robot capable of capturing drones mid flight for recharging
- Organized trips to consultant company's HQ to update CEO + Lead Mechatronics Engineer on progress and deliverables
- Budgeted $5000 of parts through Notion and Excel to accelerate project workflow and deliver project in-budget
- Managed weekly work sessions with engineers, and ensured completion of weekly tasks through consistent check-ins

RobLES Project **August 2023 – Present**

Devices Team Member *Berkeley, CA*

- Research and designed attachable robotic limbs controlled through impulses received from user's abdominal region
- Modeled arms in Onshape, achieving 6 DOF robotic limbs capable of supporting end effector claws. Ensured design was easily interfaceable with all potential electronics housed in it, while prioritizing the safety of the user and those nearby
- Calculated positions of arms through concepts of inverse kinematics, allowing for desired level of control and dexterity
- Iterated on previous front end circuit designs to attenuate desired signal readings from planted electrodes on user's body

Sentien Robotics **January 2023 – May 2023**

Engineering Consultant *San Francisco, CA*

- Utilized Solidworks to model package sorting mechanism aimed at enabling Sentien Robotics to expand into fields of drone delivery. Conducted FEA analysis to ensure system's stability and ability to handle 30+ packages
- Implemented bluetooth communication through HC-05 Modules and Arduino Microcontrollers for wireless transmissions, while working within the constraints of many unique drones' internal communication interfaces
- Prototyped and actuated 4 different end-effector attachments for drones, optimizing design for a weight of <900g