Durga Moorthy durga.s.moorthy@vanderbilt.edu (669) 246-8629

EDUCATION

Vanderbilt University — Bachelor of Biomedical Engineering, 3.74 GPA

Aug 2024 - Present

Relevant Coursework: APCSP, APCSA, Introductory Programming for Engineering and Scientists, Rapid Prototyping, Engineering Management: Applied Behavioral Science, Innovations in Biomedical Engineering

Saint Francis High School — 4.42 GPA, High Honors

Aug 2020 - May 2024

SKILLS AND INTERESTS

Autodesk Fusion, Inventor, Adobe Photoshop, Python, Java, HTML-CSS, MATLAB

Shop skills: Lathe, drill press, cold/chop/band/jigsaw, 3D printer, CNC router/vinyl cutter

Bilingual: Fluent in written and spoken English and Tamil, basic Spanish, **Lifeguard:** worked for 2 summers, American Red Cross CPR/AED certified

PROJECTS

First Robotics Competition— Mechanical Design

Jan 2021 - May 2024

Intake Mechanism - designed a lightweight, compliant floor-intake system to acquire game pieces from an unpredictable field, prototyped with different surface materials to best grip game pieces

Rotary Joint Optimization - redesigned a rotary joint to be cheap, 3D printable and hollow to optimize for future dual-ended rotary arm applications

Elevator - implemented a vertically tunneling, spring-based elevator system capable of lifting 100+ pounds and stowing within tight height constraints

TEDx — Speaker and Program Director

Nov 2022- May 2024

Selected to deliver a TEDx talk about experience with childhood alopecia

Directed TEDx program that reached over 1 million viewers, hosted speaker workshops and events by coordinating with external coaches and mentors, and oversaw event planning by leading student subgroups and working alongside faculty

WORK EXPERIENCE

Veterans Affairs Hospital — Medical Pathology Intern

May - Aug 2023

Selected as one of four students to learn educational and functional medical morgue tasks including dissection, autopsy, and suture procedures. Shadowed OR department cases & diagnostic conferences, interacted with patients daily, learned alongside medical residents in rotating fields (podiatry clinic, BME implant applications, radiology clinic, operating room, emergency medicine etc.)

The Coder School South Bay — Computer Science Teacher

May 2022 - Jun 2024

Built custom lesson plans for diverse skill-levels of students aged 7-85 in Python, Scratch, Java, basic editors/Game-based environments and APCSA/APCSP prep

Panorama Research Lab — Student Shadow

May 2023

Shadowed gene therapy cancer researchers and learned lab skills including using instruments like spectrophotometers, conducting gel electrophoresis, and fluorescent microscopes to observe tagged cancer cells

LEADERSHIP

Water Polo Athlete — Varsity Team Captain/2x Junior Olympian

May 2020 - May 2024

Outstanding Academic All American Scholar - Issued by USA Water Polo, St. Francis Scholar Athlete Award

Lancer Robotics — Senior Board Member

August 2023 - May 2024

Made vital design decisions to guide a built team of 50+ members on a 6 week time constraint and taught new members fabrication skills/CAD implementation through an educational robotics pre-season program called Soccerbots