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, Applied Programming and Problem Solving with Python, Innovations in Biomedical Engineering

Saint Francis High School — *3.9, 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