Soham Gaggenapally, P.E. (License pending)

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Education

TUFTS UNIVERSITY **Expected: December 2022**

M.S. in Mechanical Engineering: Human-Robot Interaction GPA: 4.0

Relevant coursework: Advanced Robotics, Digital Controls, Biomechanics, Ethics for AI, Simulation for Engineers

THE CITY COLLEGE OF NEW YORK **May 2019**

B.Eng. in Mechanical Engineering with Honors

Relevant coursework: Advanced Mechatronics, Energy Systems Design, Principles of Turbomachinery, Medical Physics

Skills

Technical
CNC, Circuitry, Vacuum Tubing, 3D Printing, Milling, Band Saw, Power Tools

Software
SolidWorks, HSM, MATLAB, Revit, AutoCAD, MicroStation, C++, Microsoft Office, Arduino, MUMPS

Language
English (native), proficient in Spanish, Hindi, Telugu (native)

Experience

EPIC SYSTEMS Madison, WI - *Technical Solutions Engineer* **06/2020 – 08/2021**

- Deployed and maintained different modules and products for several clients across the nation; most recently directed an organization to go live with 3 new functionalities at once with 0 critical post-install issues
- Met and brainstormed with CIO, COO, and other executives as well as operational users to assess organization health and pitch new projects to keep clients at the forefront of the industry and ahead of government regulations
- Worked with analyst teams to troubleshoot issues with software and write or modify code as necessary

PEAK MECHANICAL via AVI ENG. ASSOC. NYC - *BIM Coordinator, Sprinkler Engineer* **11/2019 – 02/2020**

- Used Revit and Navisworks to create and modify fire protection BIM models based on blueprints and schematics
- Held coordination meetings with client to resolve conflicts with other MEP trades as well as architechture
- Performed hydraulic calculations for piping and other components and create necessary shop drawings

JACOBS ENGINEERING NYC - *Engineering Intern* **05/2018 – 08/2018**

- Designed and drafted drawings for barrier transitions with MicroStation while maintaining the QA/QC process
- Verified results of ANSYS simulations for smoke flow and pedestrian egress by using variable input parameters
- Organized workflow across disciplines to remove blocks and efficiently standardize deliverables for the NYS DOT

Projects

HYDRAULIC MUSCLE POWERED EXOSKELETON *Engineer, Researcher* **08/2018 – 07/2019**

- Led group of 5 students to design and fabricate a state-of-the-art soft exoskeleton powered by a hydraulic artificial muscle that can lift over 200 times its weight, verified through multiple FEM/FEA studies and manual testing
- Worked with the Biomechatronics and Intelligent Robotics Lab to allow integration into a larger, full-body exoskeleton
- Used Arduino, PID, and sensor based control schemes to produce a variable degree of automation for arm movement

HUMAN POWERED VEHICLE CONTEST *Engineer* **10/2015 – 05/2017**

- Headed a subproduction group to create an impact resistant fiberglass shell ahead of production schedule
- Helped create carbon fiber frame using vacuum tubing for a recumbent tricycle with lean-steering mechanism
- Used CAD models and ASME specified codes and stress tests to check, guarantee, and record safety compliance

Licenses and Affiliations

Fundamentals of Engineering (FE) | *Mechanical* Licensed **01/2019**
Principles and Practice of Engineering (PE) | *Mechanical: Machine Design and Materials* Exam Passed **10/2019**
American Society of Mechanical Engineers (ASME) | *Member* **10/2015 – Present**