Aashi Goel

aashigoel03@gmail.com | (781)-952-4445 | Boston, MA | linkedin.com/in/aashigoel

OBJECTIVE

I am seeking a Fall 2024 co-op position related to engineering and full-time opportunities starting after May 2025.

EDUCATION & AFFILIATIONS

Worcester Polytechnic Institute (WPI), Worcester, MA — AUG. 2021 - PRESENT

B.S. in **Robotics Engineering**, Minor in **Computer Science |** GPA: 3.69/4.0 | Dean's List | Graduation: **May 2025**

Campus Involvement: Alpha Gamma Delta, Society of Asian Scientists & Engineers, Society of Women Engineers

External Organizations: Rewriting the Code, Aspiring Professionals in STEM

SKILLS

C/C++, Java, MATLAB, Python, Solidworks (CSWA certified), HTML, CSS, Git/GitHub, SQL, AutoCAD, ArcGIS Pro

WORK EXPERIENCE

Gas Asset Management & Engineering Intern — National Grid, Waltham, MA — JUN. 2024 - PRESENT

- Design AutoCAD drawings of gas lines and create a Bill of Materials (BOM) for construction
- Create paving layers in ArcGIS Pro using Python and databases knowledge

Energy Efficiency Procurement Intern — National Grid, Waltham, MA — JUN. 2023 - AUG. 2023

- Played a strategic role in supplier selection by contributing to the execution of a Request for Proposal (RFP)
- Managed and executed contract changes for company's energy efficiency initiatives to ensure seamless transitions
- Collaborated closely with stakeholders to identify and implement appropriate strategic sourcing methods

Customer Experience Intern — National Grid, Waltham, MA — MAY 2022 - AUG. 2022

- Initiated and executed research projects to propose solutions aimed at elevating customer satisfaction scores
- Leveraged industry trends and conducted data-driven market research to inform and drive recommendations to improve customer engagement in company programs (currently being used to develop new company mobile app)

RESEARCH

AVA Robotics Tour Guide Project, Perception & Autonomous Robotics Group (PeAR), WPI — MAY. 2024 - PRESENT

- Design a vision-based system that allows the robot to use an elevator and navigate multiple floors of a building
- Utilize a pathfinding algorithm for the robot to move to/from an arbitrary point & localize the robot using SLAM

PROJECTS

LIDAR Mapping & Path Planning Robotics Project, WPI — OCT. 2023 - DEC. 2023

- Mapped and navigated through an unknown maze using ROS nodes and services within a Linux-based environment
- Developed occupancy grid, padding, mapping, frontier finding, and path planning algorithms in Python
- Utilized the LiDAR-equipped TurtleBot3 platform to implement simultaneous localization and mapping (SLAM)

Pick-&-Place Sorting Balls Robotics Project, WPI — AUG. 2023 - OCT. 2023

- Programmed a 4-DOF robotic arm in MATLAB to pick and sort objects based on color on a checkerboard base
- Implemented kinematics and trajectory planning to move robot's end effector to its desired positions
- Created computer vision system to determine color of objects and localize them to checkerboard coordinates

Escape Room Maze Robotics Project, WPI — MAR. 2023 - MAY 2023

- Implemented embedded programming in C++ to enable 3 robots to autonomously navigate a complex maze
- Applied speed control algorithms to achieve precise movement control and MQTT broker for robot communication
- Incorporated PID controllers and sensor fusion for accurate navigation and utilized ESP32 microcontroller

Panel Replacement Robotics Project, WPI — AUG. 2022 - OCT. 2022

- Programmed state machines in C++ to create autonomous algorithms that control 2 robots via infrared remote
- Created detailed Solidworks assemblies & 3-D printed and laser-cut fourbars and grippers for mechanical design

LEADERSHIP

Vice President of Academic Excellence, Alpha Gamma Delta - Zeta Zeta Chapter, WPI — DEC. 2023 - PRESENT

- Organize events and provide other academic resources to help improve the chapter's performance and GPA

Undergraduate Mentor, Women's Research And Mentorship Program, WPI — SEP. 2023 - DEC. 2023

- Mentored two high school students in building an autonomous robot using teamwork and communication skills