

Aragya Goyal

Linkedin: [linkedin.com/in/aragya-goyal/](https://www.linkedin.com/in/aragya-goyal/)
Github: github.com/Aragya1642

Mobile: +1-610-615-7007
Email: agoyal1642@gmail.com

EDUCATION

- University of Pittsburgh** Pittsburgh, PA
 - B.S. - Computer Engineering (Autonomous Systems Focus); GPA: 3.99* *August 2022 - April 2026*

SKILLS

- Languages:** Python, C++, ARM Assembly
- Technologies:** Linux, ROS, Github, Solidworks, MATLAB, Microsoft Products, Arduino, Raspberry Pi, OpenCV
- Manufacturing:** Milling, Soldering, Laser Cutting, General Shop Tools

RELEVANT EXPERIENCE

- Carnegie Mellon University - Robotics Institute (Biorobotics Lab)** Pittsburgh, PA
 - Undergraduate Researcher (Part-Time)* *April 2023 - Present*
 - Underwater Snake Robot:** Created project based course using Unsupervised learning and natural language processing.
 - Apple's E-Waste Recycling Project:** Created tutorial for Q-learning RL algorithm and concepts.
- Society of Astronautics and Rocketry** Pittsburgh, PA
 - Chief Engineer (Student Led Organization)* *August 2022 - Present*
 - Full Rover Integration:** Created project based course using Unsupervised learning and natural language processing.
 - Robotic Hand:** Created tutorial for Q-learning RL algorithm and concepts.
- FIRST Robotics** Exton, PA
 - Team Captain/Design Lead (Student Led Organization)* *January 2023 - May 2023*
 - Project Course - Find Movie Similarity from Plot Summaries:** Created project based course using Unsupervised learning and natural language processing.
 - Tutorial - Introduction to Reinforcement Learning:** Created tutorial for Q-learning RL algorithm and concepts.
- VEX Robotics** Royersford, PA
 - Team Captain (Student Led Organization)* *January 2023 - May 2023*
 - Project Course - Find Movie Similarity from Plot Summaries:** Created project based course using Unsupervised learning and natural language processing.
 - Tutorial - Introduction to Reinforcement Learning:** Created tutorial for Q-learning RL algorithm and concepts.

TECHNICAL PROJECTS

- STM-32 Elevator Simulator (ARM Assembly, PCB Design, Project Integration):** Designed and Implemented software architecture in ARM Assembly to operate a physical elevator simulator PCB. (Link: https://github.com/Aragya1642/STM32_Elevator_Project/tree/master)
- Custom Cane (Human Centered Design, Solidworks, Presentation):** Designed and manufactured a Walker-Cane Fusion to make bathrooms more accessible for wheelchair users. The project won first place at the Senior Design Expo within its category. (Link: <https://tinyurl.com/CustomCane>)
- Formula SAE E-Brake Bias:** Designed and developed an award winning e-brake bias system for a formula style racecar, utilizing Solidworks and 3D printing technology to enhance performance and usability. (Link: <https://tinyurl.com/ebrakeb>)
- String Art Generator and Optimizer:** Developed an innovative string art optimization tools and GUI using Python programming to improve upon existing string art generators. (Link: <https://github.com/Aragya1642/OptimizationOfStringArt>)
- Silicon Prosthetic Hand (Research, Solidworks):** Designed and Manufactured prototype prosthetic hand with silicone soft actuators and tested with human participants for AP Research Project. (Link: <https://tinyurl.com/myprosthetic>)

HONORS AND AWARDS

- Awarded title of Intel Software Innovator - May, 2019
- Second Runner's Up at TCS EngiNx Engineering Project Innovation Content - September, 2018
- Runner's Up at Facebook Developers Circle Hackathon - August, 2017

VOLUNTEER EXPERIENCE

- Community Lead at Developer Student Clubs NSEC** Kolkata, India
 - Conducted online and offline technical & soft-skills training impacting over 3000 students.* *Jan 2019 - Present*
- Event Organizer at Google Developers Group Kolkata** Kolkata, India
 - Organized events, conducted workshops and delivered workshops reaching over 7000 developers.* *Jan 2018 - Present*

