Srikanth Aravinda Giovanni Schelbert

(319) 631-9522 | srikanthschelbert@gmail.com

EDUCATION

Northwestern University McCormick School of Engineering (Evanston, IL) *Expected Graduation Dec. 2024*
Masters of Science in Robotics
Current Coursework: Embedded Systems (ROS2), Robotic Manipulation, Swarm Robotics, Dynamics and Simulation
Upcoming Coursework: Robotic Navigation and Sensing (SLAM), Mechatronics, AI programming, Individual Project

University of Pittsburgh Swanson School of Engineering (Pittsburgh, PA) *Graduated Apr. 2020*
Bachelor of Science in Mechanical Engineering
Minor in Chemical Engineering

RELEVANT PROJECTS

- 7-DOF Robotic Arm for Human-in-loop Hangman Gameplay using custom Python API (ROS2, MoveIt, OpenCV)
- Swarm Robot Art through Hop-count Localization (Python, Pygame)
- Robot Segregation Based on Brazil Nut effect (NU Coachbots, Python)
- Computer Vision Based Pen Grabber (OpenCV, Interbotix, ROS2)
- Maze Solving Algorithm using both Breadth-first and Depth-first Techniques (Path Planning, Pygame)
- Rapidly-exploring Random Tree (RRT) Algorithm (Matplotlib, Path Planning)
- Coding “Space Invaders” using Pygame (Python3, Pygame)
- Design of an Apparatus to Study Patella Fracture Repairs (Undergraduate Capstone)

RELEVANT WORK EXPERIENCE

Hitachi Rail STS (Pittsburgh, PA) *Jun. 2022 - Aug. 2023*
Associate Hardware Engineer
• Designed multiple hardware components for onboard and ground equipment reducing manufacturing costs by over 10% and saving over $10,000 through the redesign of LED signal thermal pads.
• Designated work package lead researching 3D printing techniques to assess the business feasibility of introducing additive manufacturing to the repertoire of Hitachi STS.
• Authored technical documentation including test specifications resulting in the introduction of over 30 new revisions of railway parts over multiple projects.

Gather AI (Pittsburgh, PA) *Nov. 2020 - Jun. 2022*
Deployment/Field-Ops Engineer
• Established processes to deploy an autonomous drone in warehouses leading to over 70% of customers expanding beyond initial pilot phase leading to committed $0.75 million ARR.
• Designed and fabricated multiple hardware components for an autonomous charge pad; This process involved significant electrical testing, part sourcing, 3-D printing, BOM curation, and assembly instructions.
• Administered numerous QA tests both in-field and in-office using git, ROS, RViz, and benchtop lab equipment to further develop the scope and robustness of the robot’s software, autonomy, hardware, and UI often leveraging end-to-end knowledge of our product.

RELEVANT SKILLS

Programming Languages: Python, C++ , C, BASH, MATLAB, HTML/XML
Robotics: ROS2/ROS, Ignition Gazebo, Robot kinematics, Motion Planning, MoveIt, OpenCV, AprilTags
Manufacturing: SolidWorks (CAD), Fusion 360 (CAD), SolidEdge (CAD), ANSYS
Software: Linux (shell script), Git, Cmake, Unit test/Pytest, Microsoft Office Suite (including Excel), , MATLAB/Simulink, Overleaf (LaTeX), Google CoLab (Python), Atmel Studio (C)