Sarvesh Thiruppathi Ahila

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EDUCATION

Oregon State University

GPA: 3.89

Bachelor of Science in Electrical and Computer Engineering, Minor in Computer Science Expected Graduation: 2026

- Member of AIAA's Avionics System Design Team, and High Altitude Liquid Engine Team (HALE) Team
- Garmin ECE Scholar, Engineering Dean's List and Honor Roll x5
- Relevant Coursework: Data Structures, Electrical Fundamentals, Digital Logic Design, and Differential Equations

EXPERIENCE

Electrical and Programming Specialist

Nov. 2023 - Present

Openly Published Environmental Sensing Lab

Corvallis, OR

- Developed and tested environmental sensing devices for climate research in local and indigenous communities using Arduino IDE and C++ with MongoDB for advanced data management
- Collaborate closely and communicate with a multidisciplinary team of 4 specialists to execute projects efficiently under supervision of faculty and graduate researchers

Undergraduate Learning Assistant

Jan. 2024 – May. 2024

College of Engineering, Oregon State University

Corvallis, OR

- Led two weekly 110-minute studio sessions, guiding 25 students through the engineering project lifecycle with an emphasis on practical execution and management skills, utilizing Feather M0 boards and Arduino IDE in C++
- Collaborated in weekly planning meetings with faculty and TAs to refine curriculum and improve lab experiences, also preparing for upcoming week's studios
- Offered one-to-one support during office hours, helping students refine engineering projects and advance programming skills

Computer Science Intern

Jul. 2023 - Aug. 2023

Tamil Nadu Smart and Advanced Manufacturing Center (TANSAM)

Chennai, TN, India

- Led 5 interns in Flask website development for vehicle tracking, also crafting documentation on Flask deployment and CUDA training, boosting team efficiency
- \bullet Spearheaded shift to Nvidia CUDA-based training, optimizing code to achieve a 10x increase in training speed and improving model runtime efficiency by a factor of 3
- Actively participated in dataset annotation and led code enhancements, markedly boosting model accuracy by 60% and improving operational efficiency

UAV Intern and Remote Pilot Trainee

Apr. 2022 – Jun. 2022

Center for Aerospace Research, MIT

Chennai, TN, India

- Engaged in engineering projects, assisting in drone assembly, testing, and gaining exposure to Python and DroneKit API and ArduPilot ground station software for enhanced drone simulation understanding
- Accomplished a 95% score in remote pilot license training, covering aviation regulations, meteorology, and emergency procedures—second highest among 25 peers

Projects

Focii | Chrome Web API, Python, Javascript, HTML/CSS, Node.js, Figma, Git

Fall 2023

- Won Hack Education Fall 2023 among 95 participants at Oregon State University
- Collaboratively developed Chrome extension with backend server for enhanced user focus
- Implemented and hosted custom ML algorithm for website filtration via word embeddings

shortsGenerator | Python, Bash, Git, APIs

Spring 2023

- Won Beaver Hacks Spring 2023 among 66 participants at Oregon State University
- Partnered with 3 teammates to implement a command line tool to generate short-form videos using AI
- · Attained a significant boost in productivity, reducing video creation time from hours to mere seconds

TECHNICAL SKILLS

Languages: Python, C/C++, Javascript, Java, Lua, Verilog, HTML/CSS/XML

Frameworks: Arduino, MongoDB, Flask, React Native, Ultralytics, DroneKit API

Developer Tools: Matlab, Platform.io, Autodesk Fusion 360, Ultimaker Cura, LT Spice, Git, VS Code, Linux,

Microsoft Office 365 and Google Suite