

SAHRAN ASHOOR

+1 (832) 917 8840 | ashooorsahran@gmail.com | </> seashoo.me | seashoo | ashooorsahran

EDUCATION

University of Houston, *Bachelor of Science, Computer Engineering* | Houston, TX GPA: 3.89 / 4.0 Aug 2023 - May 2027

Coursework: Programming & Data Structures | Circuit Analysis I | Engineering Mathematics | Discrete Mathematics | Computing & Problem Solving for Engineers | Introduction to Programming 1 & 2

SKILLS

Languages Python, C, C++, C#, Java, JavaScript, Swift, Lua, MATLAB, HTML, CSS

Technologies Next.js, Node.js, TensorFlow, PyTorch, OpenCV, React, Django, MySQL, Unity, Raspberry Pi, Arduino

EXPERIENCE

University of Houston, *PROMES Workshop Facilitator* | Houston, TX

Aug 2024 - Present

- Led instruction and facilitation of a 1-credit hour workshop section for ENGI 1331 - Computing & Problem Solving for Engineers.
- Provided both lecture-based instruction and one-on-one tutoring for students on **MATLAB**-based topics.
- Held twice a week, I ensure 50+ student needs are met by curating custom-tailored materials and study guides that align with lecture curriculums.

Amazon Web Services, *Software Development Engineer Intern* | New York, NY

May 2024 - Aug 2024

- Wrote and published DynamoDB DAX Cluster controls for the Controls Tower platform, using **AWS Guard** and **CloudFormation** to interact with encryption in transit ('TLS'). CFN stacks deploy in supported global regions to ensure host-client data security.
- Developed a **Python** based, Git-inspired command-line-interface toolset for proactive controls, automating client-host interaction with a tailored notification system. The CLI tool is usable across the company, and deployed at-will in control dev environments under AWS Governance.
- Worked as the sole SDE in a team of security research engineers, and facilitated communication with an adjacent software team. Controls I developed under **DynamoDB** were pulled from a back-catalogue of team needs that were most suitable for an SDE skillset.

Engineers Without Borders UH, *Travel Intern & Technology Lead* | Valle Valerio, NI

Sept 2023 - June 2024

- Travelled as part of a 7-person to the community and implemented a water pump redesign solution with approval of local leadership.
- Design featured a robust circuit layout to interface with a 220VAC power supply, incorporating existing pump systems. Ensured compliance with electrical safety standards, conduit layout, and grounding for long-term reliability in an outdoor environment.
- Led and trained a team of 5 developers to continuously improve and update the official EWB-UH webpage. Established an administrator login system with a **Django** back-end and **MySQL** database.

Olezka Global, *Security Systems Intern* | Houston, TX

Sept 2023 - May 2024

- Conducted in-depth network traffic analysis using **Wireshark** and to identify and troubleshoot potential security vulnerabilities within client systems.
- Presented to school leadership at several Houston locations prior to its opening in January 2024.

PROJECTS

SortSite

- **React**-based **Node.js** web application that offers interactive algorithm visualization tools. Supported algorithms include quick sort, merge sort, and bubble sort.
- Additional pathfinding visualization tool is available, which allows users to interact with weighted pathfinding methods like A* and Dijkstra.

LiDAR-CV

- Computer vision navigation software built for a **Raspberry-Pi 3B+** omni-movement drone.
- Benewake TFmini LiDar sensor utilizes the **OpenCV** library to gather detailed environment data on a vertical 225 degree axis.

Decipher.AI

- Designed a **Python** application that utilizes the **OpenAI** API to recognize and calculate handwritten math expressions on a **Tkinter** panel.

Portfolio Website

- Developed a **Next.js** web application to display my projects, with deployments managed through **Vercel**.

Achievements

2023 Generation Google Scholarship - \$10,000

1 of ~50

2023 Amazon Future Engineer Scholarship - \$40,000

1 of ~400