

EDUCATION

Howard University - Washington, DC

Aug 2021 - May 2025

Bachelor of Science in Computer Science

CGPA: 4.0/4.0

Relevant Coursework: Applied Data Science, Robotics:Autonomous Navigation, Operating Systems, Linear Algebra, Computer Networks, Object Oriented Programming, Database Management Systems, Fundamentals of Algorithms

Google Tech Exchange - Exchange Program

Jan 2023 - May 2023

A Google led academic program where engineers teach CS topics to students selected from 1,000+ applicants

Relevant Coursework: Software Engineering, Product Management, Machine Learning, Applied Data Structures.

SKILLS

Programming Languages: Python,PHP/Hack, Java, Go, C, C++, C#, Ruby, JavaScript, TypeScript, Scala, Swift, Kotlin

Web and Frameworks: Node.js, Flask, React, AngularJS, HTML/CSS

Databases: PostGreSQL,DynamoDB, MySQL, MongoDB, SQL

Tools and Platforms: Docker, Kubernetes, Linux, Jira

WORK EXPERIENCES

Meta, Menlo Park, CA

May 2024 - Aug 2024

Software Engineer Intern - ENT framework

- Built and optimized a code generation API in **PHP/Hack** within Meta's EntFramework to streamline test case creation and validation for backend systems like TAO and ZippyDB, enabling efficient testing of social graph data used by internal platforms.
- Boosted API adoption by over **40%** among Meta engineers, streamlining data testing workflows across key platforms and improving engineering productivity.
- Partnered with senior engineers to architect and deploy a **scalable API solution**, meeting complex system requirements and ensuring seamless integration with existing Meta infrastructure.

Howard University, Washington, DC

Oct 2023 - April 2024

Research Assistant - Phase Based Motion Processing

- Developed and implemented video motion algorithms in **C++ and MATLAB** for processing large scale video datasets, facilitating the detection of subtle infrastructural changes.
- Enhanced video processing pipeline efficiency, achieving a **20%** reduction in computation time and enabling near real-time monitoring for structural integrity. ([Published Paper](#))

Amazon, East Palo Alto, CA

May 2023 - Aug 2023

Software Development Engineer Intern - AWS Lake Formation

- Utilized **Python and Ruby** to develop an automated deployment pipeline for Model Change Management (MCM), reducing execution time by **95%** and streamlining infrastructure workflows.
- Added **timestamp** support to data cell filters using **Java**, improving data traceability and enabling fine-grained access control in AWS Lake Formation.
- Developed and maintained backend features in **Java, Python, and Ruby**, working with AWS services including IAM, CloudFormation, and Lake Formation.

PROJECTS

Debugging Assistant using LLM ([GitHub Repo](#))

- Developed an AI-powered assistant leveraging a **Large Language Model** to analyze, debug, and suggest fixes for **Python** code through natural language interaction.
- Implemented secure function calling and sandboxed code execution to safely **test and validate debugging** suggestions within controlled environments.

Guardian Bot: A TurtleBot Care Project

- Built an AI-powered elderly care assistant using **TurtleBot 4**, integrating **SLAM, LiDAR**, depth sensing, and IMU for autonomous navigation and real-time monitoring.
- Integrated ROS 2 framework with **Python and C++** for sensor fusion, motion control, and decision-making in a healthcare assistance environment.

Blog Aggregator ([GitHub Repo](#))

- Developed a command-line RSS aggregator in **Go** with functionality to follow/unfollow feeds and view summaries or full articles directly in the terminal.
- Utilized **PostgreSQL** with **sqlc** and **goose** for migrations and type-safe queries; implemented scheduled background tasks for fetching, parsing, and deduplicating feed data.

Local Wiki ([GitHub Repo](#))

- Developed a wiki application using **Python, Flask, HTML, CSS, and Jinja**, enabling dynamic content for local place information. Deployed on **Google Cloud Platform (GCP)** via a **CI/CD pipeline**, ensuring seamless updates and minimal downtime.