AARYAN RAJESH ANAND

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EDUCATION

UNIVERSITY OF FLORIDA Gainesville, FL

Bachelor of Science in Computer Science; ***GPA: 3.86*** May 2026

Relevant Coursework: Object-oriented programming, Data Structures and Algorithms, Software Engineering, Advanced Algorithms Abstractions and Design, Operating Systems, Machine Learning, Linear Algebra, Programming Language Concepts

SKILLS

Computer Proficiency: Python, C++, C, JavaScript, Java, Git, MATLAB, SQL, Matplotlib, Pandas, Pytorch, TensorFlow, Keras, Azure, Linux, PL/SQL, Oracle APEX, Django, React, Raspberry Pi, Arduino, STM 32, Keil, Agile, Scrum, Jira, Figma

WORK EXPERIENCE

Amazon Web Services – Annapurna Labs Austin, TX

Systems Development Engineering Intern May 2025 - Present

- Developed a configurable alarming system using **TypeScript, JavaScript, React, and Python**, allowing users to define custom thresholds (including **Sev2/3 degradations**) and receive real-time notifications across thousands of servers
- Reduced average incident response time by **45%** and cut degradable events by **30%** by surfacing early warnings and improving operational visibility into the **trn1, trn2, and inf2** machine learning accelerator platforms
- Integrated with **ElasticSearch**, **PostgreSQL**, and internal telemetry pipelines to collect and process health data from distributed systems supporting high-throughput deep learning workloads

SharkNinja Boston, MA

Software Engineering Intern (Ninja R&D team) January 2024 - May 2024

- Implemented key developments for the Ninja Luxe Café, a 3-in-1 espresso, drip coffee, and cold brew machine that earned over **1,000 reviews** averaging **4.8-stars** across major retailers like Best Buy and Amazon
- Achieved control accuracy and system reliability for the Ninja Luxe Café by engineering precise PID controllers in **C** and **C++** for the boiler, pump, and grinder, optimizing machine performance and consistency across units
- Enhanced quality control and troubleshooting **efficiency by 60%** creating a serial data application (now in-house standard tool) with real-time data visualization in **Python** with **Matplotlib**, enabling continuous monitoring of machine performance
- Designed machine learning algorithms to ensure café-quality results achieving higher user preference for Ninja Luxe coffee over café quality in user testing validated across prototype and production models

oAppsNet Denver, CO

Software Engineering Intern May 2023 – August 2023

- Drove a **50% increase in client acquisition** across three industries by developing scalable AI-driven software solutions in **Python**, utilizing **Azure** and **Oracle AI** platforms to address complex client challenges and enhance service offerings
- Enhanced system interoperability and cut **integration time by 40%** through optimized API orchestration for **3 clients**
- Accelerated document processing **efficiency by 30%** with custom-built Oracle APEX applications, while collaborating with team on **Jira** to streamline workflows by automating data extraction from bank statements and invoices

UNIVERSITY PROJECTS & INVOLVEMENT

Machine Learning and Sensing Laboratory Gainesville, FL

Undergraduate Researcher January 2025 – Present

- Increased phenotype prediction accuracy by **35%** through implementing deep learning and traditional python based machine learning pipelines (**TensorFlow**, **scikit-learn**) on **10,000+** hyperspectral images, expediting sustainable switchgrass research
- Reduced manual data processing time by **50%** using automated feature extraction scripts and real-time spectral analysis, expanding large-scale plant phenotyping capabilities with enhanced throughput and data handling using **Pandas**
- Engineered biomass prediction models using vegetation indices and plant size metrics from drone-based hyperspectral data
- Collaborated with interdisciplinary teams to streamline data acquisition workflows, funded by the Department of Energy

Jain Lab, Human-Centered Computing Gainesville, FL

Undergraduate Researcher December 2024 – Present

- Directed research on **reinforcement learning** driven swarm robotic manipulation in **Virtual and Mixed Reality** (VR/MR), investigating how intelligent, adaptive swarms can serve as an interactive interface for human-computer interaction
- Engineered an experimental framework in **Unity, C#, MR, and Python**, integrating real-time asset switching, obstacle avoidance, and dynamic swarm interactions to enhance user immersion and intuitive control on the **Meta Quest Pro**