CADE CUDDY

Raleigh, NC · cadecuddy@gmail.com · cade.fyi

EDUCATION

North Carolina State University   Raleigh, NC
BS Computer Science *GPA: 3.9*   Aug 2020 - Dec 2023

EXPERIENCE

Amazon   Austin, TX
Software Engineer Intern - Supply Chain   May 2023 - Aug 2023

- Led the adoption of LLM technology within organization, achieving an average 84% detection rate for anomalies in Amazon's supply chain data using generative AI
- Designed and implemented generative AI anomaly detection system using text embeddings, Python, LangChain, AWS Lambda, and a specialized vector database
- Deployed service via CI/CD pipeline & worked with cross-functional team of scientists & engineers to successfully integrate LLM solution with production data

Amazon   Austin, TX
Software Engineer Intern - Ring   May 2022 - Aug 2022

- Designed, implemented, and deployed full-stack internal computer vision classification feedback system, reporting CV misclassification data on a 100,000,000+ events/month API
- Led the development of an internal web application feature using React, Typescript, NodeJS, and DynamoDB to provide information about misclassified CV events
- Built scalable backend data pipeline capable of analyzing CV classifications on millions of Ring Doorbell events using Go & AWS
- Launched feature on production environment, delivering enough feedback to improve model accuracy by 9%

Liquid Rocketry Lab   Raleigh, NC
Programming Lead   Aug 2020 - Present

- Led team of 10 student developers on multiple projects, including: a compiler, full-stack mission control dashboard, and embedded microcontroller firmware suite
- Implemented complete binary data disassembler and test-file parser in Rust to ensure valid compiler output, saving 20 engineering hours per week
- Built high performance mission control UI using React complete with realtime telemetry visualization and an InfluxDB time-series database for persistence

PROJECTS

Rocket Engine Testing Language & Compiler *Rust, Python*

- Assisted in developing a compiler for a custom programming language designed for rocket engine testing on test stands
- Implemented binary disassembler, enhancing the team's capability to reverse-engineer, analyze, and test compiled code
- Enhanced compiler efficiency by implementing parallel compilation, and improved developer experience through advanced, context-aware error diagnostics, resulting in 50% reduced build times and easier debugging

CS:GO Case Financial Hub *React, TypeScript, AWS Lambda, PostgreSQL, Next.js*

- Developed a full-stack web application to help CS:GO players calculate costs of complex in-game transactions
- Automated scraping of real-time Steam market data using AWS EventBridge and Lambda, publishing data to remote MySQL database every 15 minutes
- Deployed application, accruing 1,500+ weekly users and 4.5K weekly page views

TECHNICAL SKILLS

Programming Languages:	Python, TypeScript, JavaScript, Java, Rust, Golang, C, HTML/CSS, SQL
Libraries & Frameworks:	React, tRPC, Next.js, TailwindCSS, Node.js, Prisma, pandas
Developer Tools:	Git, Docker, Linux, AWS, Figma, Terraform, Jira, Kubernetes