Adrian Edwards

Kennesaw, GA
770-807-9141 aedwards0603@gmail.com https://www.linkedin.com/in/netedwards/
https://github.com/netEdwards

Summary

Software Engineering student graduating in December of 2026 with fast paced startup production experience building cloud infrastructure using infrastructure as code, designing and developing distributed computing systems within Kubernetes, backend API development and using AI for automation. I am looking to grow in a engineering environment
Work Authorization: U.S. Citizen

Education

Kennesaw State University **2021 – 2026**
Bachelor of Science in Software Engineering *Kennesaw, Georgia*

Experience

Endecta LLC – Early Stage Startup **May 2024 – Aug. 2025**
Software Engineer, Systems / Infrastructure *San Francisco, CA*

- Architected and implemented reproducible cloud infrastructure using Terraform, AzureRM, Azure Kubernetes Service, VNets, NGINX routing, and CI/CD pipelines to support production AI and automation workloads.
- Eliminated approximately $2,000/month in Databricks costs by designing and deploying a custom Python ETL pipeline on AKS with secure HMAC-authenticated backend job triggers.
- Built full-stack production applications using Next.js, Express.js, Docker, Kubernetes, autoscaling configuration, and API routing to support internal engineering and client-facing workflows.
- Developed a LangGraph-based automation system that ingested CSV/PDF engineering schedules, performed structured extraction, room categorization, LPD calculations, compliance validation, and remediation report generation.
- Engineered distributed event-driven architecture using gRPC, Azure messaging services, and asynchronous workload orchestration to support reliable AI processing and rapid iteration.
- Designed a Pregel-inspired graph processing system on top of a knowledge graph embedding layer to support scalable semantic search and agentic reasoning over technical datasets.

Projects

Pressured Evolution System - Physics Simulation Engine (GitHub) — C, Numerical Integration, Systems Programming
May 2026 – Present

- Developing a staged C-based physics simulation project to study systems programming, numerical integration, force modeling, and simulation architecture from first principles.
- Implemented multi-object state evolution using position, velocity, acceleration, mass, net force accumulation, simplified air resistance, and gravitational interaction between simulated objects.
- Using Euler integration as the initial baseline while documenting expected limitations such as numerical drift, chaotic behavior under orbital dynamics, and pressure for improved integrators.
- Planning near-term improvements including modular force/integrator components, CSV telemetry output, deterministic validation tests, orbital injection experiments, and Euler vs. RK4 comparison.

Reflection – Independent Project (GitHub) | *Python, JavaScript, OpenAI, PyTorch, LMStudio* **November 2023**

- Engineered a local-first AI system that embeds markdown knowledge into a vector database, enabling semantic retrieval and agent-driven workflows through custom orchestration.
- Built a PyWebView desktop application with a React/TypeScript frontend for interacting with ETL services, retrieval workflows, and local AI tooling.

Technical Skills

Simulation & Test: numerical integration, vector math, force models, telemetry, systems validation, HIL/test systems
Languages: C, Python, JavaScript/TypeScript, C++, Bash, SQL

Systems & Infrastructure: Linux, Docker, Kubernetes, Azure, Terraform, AzureRM, NGINX, CI/CD, Git

Software Engineering: REST APIs, gRPC, microservices, event-driven systems, distributed systems, automation, testing, validation

AI & Data: LangGraph, LangChain, ETL pipelines, vector embeddings, RAG, knowledge graphs, MongoDB, SQLite

Hardware, Lab & Networking: PC builds/upgrades, Cat6 home networking, Linux workstations, SSH, virtual machines, basic IP networking, local development services