

Adamya Singh

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EDUCATION

Rutgers University

B.S. in Computer Science and Data Science | GPA: 3.6

New Brunswick, NJ

Aug 2023 – May 2027

- **Relevant Coursework:** Artificial Intelligence, Machine Learning, Deep Learning, Algorithms, Data Structures, Discrete Mathematics, Computer Architecture
- **Leadership & Activities:** USACS (CS Club) — Tech Team Lead & Executive Board Member, STAR (Space Technology Association at Rutgers)
- **Honors & Awards:** Winner, Verizon Smart Campus Challenge 2025 (AI-powered scheduling platform); Dean's List; Eagle Scout

EXPERIENCE

Software Engineering Intern

Nov. 2025 – Present

Aviro (YC-backed enterprise AI agents platform)

Remote

- Contributing to a full-stack document-to-HTML platform (Next.js 15, TypeScript, FastAPI, Supabase) that prepares enterprise documents for long-horizon AI agents built on Aviro's reinforcement learning runtime
- Extending backend services in **FastAPI** for document ingestion, replication, and sync/progress tracking, designing clean APIs between vision/LLM calls, agentic edit loops, and storage
- Building advanced **TypeScript/Next.js** UX for multi-page document editing, placeholder/image workflows, and prompt-history/analytics views to debug and improve agent performance in production

Software Engineer (MVP Development), Fusen Fellow

May 2025 – August 2025

rebootED (tryrebooted.com, backed by Fusen World Accelerator & Google for Startups)

Atlanta, GA

- Engineered an enterprise L&D MVP end-to-end: designed **Spring Boot + PostgreSQL** services with JWT auth and REST APIs, and a **Next.js + TypeScript** frontend with role-based dashboards and analytics, sized to support **10K+ learners** in orgs with **1K+ employees**.
- Implemented AI-driven course generation pipelines that reduced content creation time by **80%** while preserving quality and adaptability across enterprise training programs.
- Partnered with **15+ enterprise tech orgs** to validate requirements, harden multi-tenant architecture, and ship production-ready specs for large-scale deployments.

Undergraduate Research Assistant - Computer Vision

Jan. 2025 – Present

Rutgers University, Computer Science Department

New Brunswick, NJ

- Investigating vision-language model (VLM) failures in negation comprehension using **225K+ multimodal medical images** from the CheXpert dataset
- Benchmarked **3+ GenAI VLMs** (e.g., **CLIP**, **BioMedCLIP**) on negation-sensitive tasks using **PyTorch**; developed domain-specific evaluation tools to identify reasoning failures

PROJECTS

RU-Networking | Next.js, OpenAI GPT-4o, Assistant API, RAG, PineconeDB

- Built a full-stack AI-powered course planning assistant for **70,000+** Rutgers students using RAG, engineering function-calling workflows, tool orchestration, and Server-Sent Events to deliver **real-time, production-scale chat recommendations**.
- Reverse-engineered undocumented endpoints and developed a highly parallelized Python scraper to extract and clean a **1M+ line dataset**, powering a custom SQL-backed recommendation engine.

AtomicCoach: LLaMA 3 Fine-Tuning | LLaMA 3 8B, LoRA, QLoRA, HuggingFace, PyTorch

- Built a scalable AI-powered behavioral coach by fine-tuning Meta's **LLaMA 3 8B** LLM on *Atomic Habits*, enabling high-quality, personalized habit formation guidance
- Created a **2,300+ Q&A dataset** and fine-tuned using **LoRA** and **QLoRA**, reducing memory requirements by **60%+** and making training viable on laptops

TECHNICAL SKILLS

Languages: Python, Java, C/C++, JavaScript, HTML, CSS, SQL, R, Bash

Frameworks / Tools: React, Node.js, Git, AWS S3, Ollama, Linux, Tableau, MongoDB

Libraries / ML: DSPy, HuggingFace, PyTorch, NLP, VLA, Computer Vision, Reinforcement Learning,