

Darshon Singh

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Education

Rice University

Expected May 2028

B.S. in Electrical & Computer Engineering

Houston, TX

Minors: Engineering Design, Data Science, Computational & Applied Mathematics

GPA: 3.73/4.0

Coursework: ELEC 631 Agentic Textbook Design, ELEC 537 Intelligent Mobile Systems, AI-Enabled Robotics

Engineering Study Abroad: Tokyo, Japan (May–June 2025)

Skills

Languages & Libraries: Python, C/C++, SQL, Verilog HDL, MATLAB; PyTorch, scikit-learn, NumPy, pandas

AI, Systems & Data: LoRA fine-tuning, RAG, diffusion models, agents, Linux, Git, Docker, PostgreSQL, Spark, AWS

Hardware & Design: ESP32/Arduino, FPGA/Vivado, KiCad, LTspice, SolidWorks

Experience

OpenStax

May 2026 – August 2026

AI Engineer

Houston, TX

- Raised the successful video-clip rate from 5% to 95% by fine-tuning a diffusion model on a single consumer graphics card.
- Turned OpenStax textbook sections into animated videos by building the generation pipeline with a 5-person team.

CareerSpring

Apr 2026 – August 2026

Forward Deployed Engineer

Remote

- Built a mentor matching system for a national nonprofit which grew scheduled mentor networking calls by 50%
- Saved staff 5+ hours/week by building an end-to-end configurable matching pipeline for 10,000+ advisors and advisees.

Rice University: EDES 210/550 Prototyping & Fabrication

Aug 2025 – Dec 2025

Teaching Assistant

Houston, TX

- Saved 3 hours/week of routine QA by building an AI teaching assistant grounded in course materials.
- Trained 50+ undergraduate and graduate students on laser cutters, CNC mills, water jets, plasma cutters, and 3D printers.

Projects

Cling-E: Autonomous Following Robot | On Display, 3-Person Study Abroad Project

May 2025 – Jun 2025

- Earned a spot on display at Rice's makerspace for "exemplary engineering" by building a following robot in 5 days.
- Built the robot's sensing system from 6 infrared receivers and 6 ultrasonic sensors to track users while detecting obstacles.
- Designed an omnidirectional drivetrain for maneuvering through tight indoor spaces while continuously following a user.

MBAi: Agentic Business Management | 1st Place, Claude Club Hackathon

Nov 2025

- Won 1st place solo against teams of up to four by building a drag-and-drop AI agent manager for nontechnical users.
- Removed the need to write prompts by designing agents that spawn per business function and route plain-English tasks.

Self-Hosted Computer Cluster | Ubuntu, Docker, NVIDIA RTX 3090

2025 – Present

- Ran video, image, and LLM inference, fine-tuning, and AI-safety experiments by building a multi-node computer cluster.
- Enabled remote compute without exposing the host machines by orchestrating containerized jobs across worker nodes.

Leadership

Rice AI Alignment Lab Lead: Running AI safety experiments (chain-of-thought monitoring, prefix injection) in a weekly lab

ELEC 631 Class Coordinator: Integrating 26 graduate students' projects into one platform and building evals for each

CareerSpring Ambassador: Driving adoption of the matching system I built through campus outreach and info sessions

Civic Immersion Facilitator: Led 50+ freshmen through Houston civic issues in a week of volunteering and discussion

Hobbies: Backpacking (Europe, Southeast Asia, Japan), videogame economics & design, Putnam math, content creation