

Samyak Singh

202-469-1510 | samyak@utexas.edu | [linkedin: samsingh-](https://www.linkedin.com/in/samsingh-) | [github: samsinghh](https://github.com/samsinghh)

EDUCATION

University of Texas at Austin – Austin, TX

Expected Graduation: May 2028

B.S. Computer Science (GPA: 4.0/4.0)

- **Coursework:** Computer Architecture, Linear Algebra, Data Structures and Algorithms, Discrete Mathematics, Multivariable Calculus

EXPERIENCE

Findhelp

Feb 2026 – Present

Incoming Software Engineer Intern (Summer 2026)

Autonomous Mobile Robotics Laboratory (AMRL), UT Austin

Jan 2026 – Present

Undergraduate Researcher

- Undergraduate researcher in AMRL via FRI, working on autonomous driving, robotics, and perception systems.

Axentra OS

Nov 2025 – Feb 2026

Software Engineer Intern

- Led development of a FastAPI support ticket system with JWT auth, PostgreSQL, and intelligent agent routing
- Built async REST APIs for multi-tenant ticket management with configurable settings and real-time analytics
- Reduced average ticket assignment latency by implementing dynamic workload-based ticket routing
- Improved internal support workflow efficiency by enabling tenant-level configuration and ticket visibility

Stealth Startup

Jul 2024 – Sep 2024

Machine Learning Intern

- Developed a language model system which mimics certain communication styles for personalized interactions
- Engineered data pipelines (Pandas + Reddit/Twitter APIs) processing 100K+ samples for supervised training
- Collaborated in a small peer team using Agile sprints to iterate on model quality and data-pipeline efficiency

Robot Interactive Intelligence (RobIn) Lab, UT Austin

May 2024 – Jul 2024

Research Assistant

- Conducted imitation learning experiments on the BaRiFlex gripper for household tasks using ROS integration
- Deployed experiments in Docker on Linux systems, ensuring fully reproducible and scalable training pipelines
- Optimized Python/Bash scripts to preprocess 20+ GB of robotic data into HDF5, cutting processing time by 20%

PROJECTS

Capling | *Next.js, TypeScript, Tailwind, Supabase, OpenAI GPT-4*

- Pitched at HackTX 25: an AI financial companion that interprets spending patterns and offers reflective coaching.
- Full-stack system with Next.js API routes, a custom transaction simulator, and adaptive budgeting logic.
- Leveraged GPT-4 to classify transactions, generate personalized reflections, and power contextual financial lessons.

CPU Simulator & Assembler | *C, Assembly*

- Designed and implemented a complete toolchain for a custom 64-bit RISC processor architecture from scratch
- Created a two-pass assembler with macro expansion, label resolution, and multi-segment binary output support
- Built an instruction-level simulator with 512KB memory, 32 registers, and memory-mapped I/O port emulation
- Wrote assembly programs for matrix multiplication, Fibonacci sequence generation, and binary search

Cloud Video Platform | *TypeScript, Next.js, Express.js, Docker, Google Cloud*

- Built a full-stack video sharing platform with authentication, upload workflows, and playback functionality
- Designed a custom async FFmpeg-based video pipeline using Cloud Run and Pub/Sub to transcode uploads
- Deployed a containerized backend on Google Cloud Run with Cloud Storage for scalable video hosting

TECHNICAL SKILLS

Languages: Python, Java, C, JavaScript, TypeScript, PHP, HTML/CSS, SQL, Assembly, LaTeX

Technologies: PyTorch, React, Node.js, Next.js, REST APIs, PostgreSQL, Git, Google Cloud Platform, Docker

Concepts: Artificial Intelligence, Software Engineering, Robotics, Multi-Agent Systems, Data Science