SAHIL SHAIKH

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EDUCATION

Purdue University   **Aug 2022 - Dec 2025**
Bachelor of Science, Computer Science, Data Science
- **Coursework:** Analysis of Algorithms, Machine Learning and Data Mining, Database and Information Systems, Computer Architecture, Systems Programming, Large Scale Data Analytics

SKILLS

- **Programming Languages**: Python, C, C++, Java, JavaScript, R, SQL, Assembly x86_64, Move, Rust, Go
- **Tools and Technologies**: Azure ML, Scikit Learn, PyTorch, React Native, OpenCV, Agile, Docker

EXPERIENCE

Synq   **May 2025 - Present**
Founder   *https://synq.website*
- Creating a devOps platform that integrates version control with project management, making collaboration in small, fast-moving teams realtime and easy; bootstrapped, private beta (10 MAU).
- Built a custom VCS, enabling file syncs (pulls/pushes) with Go + Python backend, using binary diffing and WebSockets to cut per-sync bandwidth by ~85-95% on small edits.
- Shipped Go-based background agent + menu bar app to automate pulls and file locks; added end-to-end tests that cut dev feedback loop by 10×.

Artificial Intelligence for Musicians Lab (under Dr. Yung-hsiang Lu)   **Apr 2025 - Present**
Research Assistant   *West Lafayette, IN*
- Developed ROS-based control software on Ubuntu for a Baxter robot, enabling it to play musical melodies on a steel tongue drum; performed 'Hot Cross Buns'.
- Programmed tempo-controlled trajectories with custom calibration scripts, boosting Baxter's strike accuracy by 67%.

Trust Lab, Indian Institute of Technology Bombay (IITB)   **May 2024 - Jul 2024**
Software Engineer Intern   *Mumbai, MH*
- Built AlgoTrust, a full-stack document verification platform using ReactJS and Python/Flask; built RESTful APIs to manage data flow between the frontend, IPFS storage, and the Algorand blockchain.
- Wrote PyTeal smart contracts integrating IPFS CIDs to bypass on-chain limits, enabling scalable, encrypted off-chain storage.

Purdue University   **Jan 2025 - Aug 2025**
Undergraduate Teaching Assistant   *West Lafayette, IN*
- Graded assignments, proctored exams, led review sessions, and substituted for lectures in CS 251 (Data Structures & Algorithms, ~45 students) and CS 253 (DSA for Data Science/AI, ~60 students).
- Held weekly office hours to help students with projects and homework, reinforcing algorithmic concepts and coding in Java/Python.

PROJECTS

GolfMate | Github   **Apr 2025**
- Implemented an AI-powered swing analysis tool that won Best AI-Driven Solution at Catapult Hacks 2025 by delivering real-time golf posture feedback using video input.
- Trained GRU model (F1 = 0.86) from 200+ labeled swings; benchmarked vs. ST-GCN and Random Forest baselines, using MediaPipe landmarks and Gemini API feedback.

3x Hackathon Wins   **Mar 2025 - Present**
- Developed cross-chain AI payment agent, AnyPay, winning "Best use of Chainlink CCIP/CCT" at ETHGlobal NYC '25. (August)
- Engineered DeepLever, a margin trading platform built on Sui, winning the prize for the best app built on Sui at Nexus, TTU's web3 hackathon. (May)
- Built a golf posture analysis tool, GolfMate, which won "Best AI Driven Solution" at Catapult '25, Purdue's AI hackathon. (April)