

SAHIL SHAIKH

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EDUCATION

Purdue University

Aug 2022 - May 2026

Bachelor of Science, Computer Science, Data Science

- **GPA:** 3.25
- **Coursework:** Analysis of Algorithms, Machine Learning and Data Mining, Database and Information Systems, Data Structures & Algorithms, Computer Architecture, Systems Programming, Object-Oriented Programming, Programming in C, Python Programming, Competitive Programming, Statistics for Data Science, Probability, Intro to Data Science, Intro to Artificial Intelligence, Statistical Theory

WORK EXPERIENCE

Trust Lab, Indian Institute of Technology Bombay (IITB)

May 2024 - Jul 2024

Software Engineer Intern

- Developed AlgoTrust, a document verification platform, using ReactJS to implement dynamic form validation and status tracking, resulting in a 4X increase in user engagement.
- Architected a secure Python/Flask backend with RESTful APIs, which facilitated IPFS storage integration and ensured efficient data flow between the React frontend and Algorand blockchain.
- Engineered smart contracts using PyTeal to address on-chain storage limitations with an innovative CID mapping system, allowing for encrypted document storage.

LocationGuru Solutions

Jun 2023 - Jul 2023

Data Analyst Summer Intern

- Analyzed telecom network data with K-means clustering to discern user behavior patterns, identifying insights into residential and occupational locations based on over 4000 data points.
- Created visualization dashboards using PySpark, matplotlib, and Seaborn to model data clusters, supporting data-driven decision-making for users.

NUS and HP

Jul 2021 - Sep 2021

Artificial Intelligence Intern

- Developed image classification models using Python, OpenCV, and TensorFlow, implementing CNNs for image manipulation and object detection.
- Architected sentiment analysis system with Keras and NLP, integrating cloud ML frameworks to predict wine taste ratings using regression models.

INDEPENDENT PROJECTS

GolfMate

Apr 2025

Winner at Catapult '25

- Developed 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
- Engineered a GRU-based model (F-score: 0.86) from 200+ pose-labeled swing samples; evaluated against ST-GCN and Random Forest baselines, using MediaPipe for landmark extraction and Gemini API for feedback generation

DeepLever

May 2025

Winner at Nexus (TTU's Blockchain Hackathon)

- Developed a decentralized margin trading platform on the Sui chain with support for lending, borrowing, and liquidation mechanisms using Move smart contracts and integrated a frontend built with React.
- Integrated custom vaults, collateralized borrowing logic, and debt tracking, enabling secure leveraged trading with modular interest and margin maintenance configurations.

Shell

Apr 2024

- Built a Unix-like terminal in C/C++ that executes complex bash commands, handling wildcards, subshells, and scripts seamlessly.
- Implemented robust command parsing using lex/ysacc, while leveraging C system calls for efficient process creation and inter-process communication.

SKILLS

- **Programming Languages:** Python, C, C++, Java, JavaScript, R, SQL, Assembly x86_64, Move
- **Tools and Technologies:** git, MongoDB, ReactJS, HTML, Azure ML, PyTeAL, Flask, CSS, Scikit Learn, PyTorch, React Native, OpenCV, Rest APIs, Next.js, Generative AI, Agile
- **Software Development Skills:** Software Engineering Experience, Software Development Lifecycle, Web Development, Mobile App Development, Data Pipelines, MLOps
- **Leadership and Involvement:** Undergraduate Teaching Assistant for CS253 (Data Structures and Algorithms for DS/AI), Development for Boiler Blockchain