

# SAHIL SUREKA

 +91-9827816732  sahilsureka0612@gmail.com  linkedin.com/in/sahil-sureka06  github.com/sahil-sureka06

## EDUCATION

**Vellore Institute of Technology (VIT), Vellore**  
B.Tech in Computer Science

August 2023 – Present  
CGPA: 9.11 — Vellore, Tamil Nadu

**Mother's Public School, Bhubaneswar**  
Higher Secondary Education – CBSE

April 2021 – March 2023  
Bhubaneswar, Odisha

## SKILLS

**Languages:** Python, Java, C, C++, JavaScript, HTML, CSS

**AI/ML:** Deep Learning (TensorFlow, PyTorch), NLP (Transformers), Data Science (Pandas, Scikit-learn)

**Databases:** MySQL, PostgreSQL, SQLite, SQL\*Plus

**Soft Skills:** Leadership, Event Management, Writing, Public Speaking

## EXPERIENCE

**HCL Technologies Ltd** | Frontend Intern

May 2024 – July 2024

- Built and deployed a Simon Game web application to engage users during outages, **boosting retention by 15%**.
- Engineered frontend with HTML, CSS, and JavaScript, optimizing responsiveness and usability.
- Optimized code structure and UI workflows, reducing load times by **20%** and increasing interaction speed.
- Collaborated with 4-member team to integrate design and functionality, ensuring **100% cross-browser compatibility**.

## PROJECTS

**Quantitative Time-Series Modeling Engine** | Python, Pandas, NumPy, Plotly, Groww API

November 2025

- Developed a **multi-factor “Value Cost Averaging” model** and an **event-driven backtesting framework** to simulate its performance against baseline models (DCA, Lump Sum).
- Architected an automated data pipeline to acquire, clean, and process over **1,700 unique time-series datasets** (6+ months of 1-hour data for 218 listed companies) via the Groww API.
- Engineered **5+ factor feature set** (Wilder's RSI, ATR, rolling quantiles) modeling market momentum, volatility, & value.
- Validated the model's alpha by aggregating and comparing ROI across the dataset, providing a quantitative framework for strategy selection and **hyperparameter tuning**.

**Harry Potter Language** | Python, TypeScript, Node.js, VS Code Extension API, Git, GitHub, Azure DevOps

September 2025

- Orchestrated the public launch of an **open-source VS Code extension** for a custom programming language, independently acquiring **230+ users** and driving **216+ installs** from the official Marketplace within 30 days.
- Developed a **Python interpreter** from scratch with a **lexer, parser, and AST** to execute a unique, themed syntax.
- Implemented rich IDE experience in TypeScript, including syntax highlighting, auto-completion, and code execution.
- Led the full SDLC from design to deployment on GitHub, managing versioning and cross-platform compatibility.

**Face Recognition Attendance System** | Python, OpenCV, face\_recognition, CSV, Git

May 2025

- Devised a real-time face recognition system using **OpenCV** and **face\_recognition** to automate attendance logging.
- Processed webcam video streams to identify faces, logging attendance with timestamps, cutting manual time by 90%.
- Configured the system to output attendance data into a CSV file, achieving **100% accuracy** in tracking personnel presence.

## ACTIVITIES

**IEEE Professional Communication Society (IEEE-PCS), VIT Vellore**  
General Secretary

April 2025 – Present

- Led recruitment, increasing member engagement by **40%** and fostering a **collaborative environment**.
- Organized **10+ technical workshops, 5+ speaker sessions**, and multiple networking events, benefiting **500+ students**.
- Managed outreach and marketing, boosting event participation by **60%** through strategic promotions.

## CERTIFICATIONS

Deep Learning Specialization – Andrew Ng, Coursera  
GEN AI using IBM Watsonx - IBM