

Shubhan Mehrotra

B.Tech.
Electrical Engineering
Indian Institute Of Technology, Palakkad

+91-9714957474
shubhanmehrotra@gmail.com
Github
Linkedin

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech.	Indain Institute of Technology Palakkad	7.83 (Current)	2021-Present
Senior Secondary	CBSE Board	90.8%	2021
Secondary	CBSE Board	93.8%	2019

EXPERIENCE

- Entrupy** June 2025 - Ongoing
Software Engineer -1
 - Architected and deployed complex, usage-based billing engines for major clients, culminating in a system , processing over 15,000+ high-volume transactions at scale.
- Entrupy** October 2024 - May 2025
Python Developer Intern
 - Engineered 5 + feature flags and profile-driven ACLs, replacing rigid role checks in 4 microservices and cutting manual access updates
 - Built a dual-category auto-assigned user-profile system with admin UI, halving org/user onboarding time.
 - Converted product controls (barcode, fingerprint, sneaker-pricing, JP-user) to toggle-based configs.
- TCS Research** June 2024 - July 2024
Computing Systems Research Intern Thane
 - Curated datasets for efficient RAG-based training on combined LLaMA and Mistral architectures.
 - Enhanced utilization metrics, hardware specs, and model data, reducing training time by 27.5 %.

PROJECTS

- Weather App for Scientists** Sept. 2024 - Ongoing
IIT Palakkad
 - Redesigned and deployed a full-stack weather monitoring application using Django REST and React Native, enabling real-time visualization of meteorological and air quality data for IIT Palakkad.
 - Integrated RESTful APIs to fetch and preprocess hourly weather metrics from ground-based sensors, supporting dynamic data rendering and user interaction across mobile platforms.
- Analyzing Kochi Metro's 5-Year Ridership and Travel Demand Data** Jan. 2024 - May. 2024
IIT Palakkad Github
 - Standardized over 30 million data points using SQL, ensuring data quality and uniformity.
 - Extracted commuting patterns, uncovering insights that boosted ridership by up to 15%.
- Baby Cry Detection for Health Monitoring using 2D CNN and LSTM** Jan. 2024-May. 2024
IIT Palakkad Github
 - Designed and trained 2D CNN and LSTM models to classify baby cries into five categories, achieving 94.57% and 91.47% accuracy, respectively.
 - Extracted spectrogram features using Short-Time Fourier Transform (STFT) for efficient audio signal classification.
- RL-Based Lunar Lander Simulation** Aug. 2023-Dec. 2023
IIT Palakkad Github
 - Designed an RL agent in OpenAI to autonomously control a lunar lander, achieving an 85% success rate.
 - Optimized simulations, reducing failure rates by 25 % and maintaining an average score above 200.
- Rule Based Chatbot** Jan 2023 -May 2023
IIT Palakkad Github
 - Conceived and launched a rule-based chatbot for basic conversations and music recommendations.
 - Administered a database of 50,000 songs and 40 user intents.

SKILLS

- Programming:** Python, C/C++, TypeScript, SQL, Java
- Databases:** MySQL, PostgreSQL, SQL Server
- Web and Mobile Frameworks:** Django, React Native
- Web Technologies:** JavaScript, HTML5, CSS3, JSON
- Other Technologies:** Arduino, MATLAB, LTSpice, KiCAD, Keil uVision

CERTIFICATION

- **DSA:** Proficient in data structures, algorithms, and efficient utilization. Certificate
- **SQL:** Skilled in database creation, complex SQL joins, MySQL 8 Window Functions, and data modeling. Certificate

POSITIONS OF RESPONSIBILITY

- **Technical Head**, Petrichor'24 - Annual Techno Cultural Fest *May. 2023 - Feb. 2024*
 - Led technical planning for Petrichor'24, boosting technical events by 27%, and broadening audience reach.
 - Managed 3 different teams and hosted Shri H.R. Hutton, Gaganyaan project director at ISRO.
- **Organiser of Technical Event**, Petrichor'23 - Annual Techno Cultural Fest *Dec. 2022 - Jan. 2023*
 - Organized and oversaw two treasure hunt events for Petrichor'23, designing unique puzzles, building a website for the sequel event, and driving promotions to achieve high participation.

CO- CURRICULAR ACTIVITIES

- **7th Place, Inter IIT Debate Competition**, at Inter IIT 6.0 Cultural Meet. *2023*
- **Secured 2nd position**, Inkeption -Creative Writing Event *2023*