Jeet Shah

jeetsh4h | jeetsh4h.dev | jeetsh4h@gmail.com | jeetsh4h

Summary

Product-minded Full-Stack Engineer and AI Researcher with a dual focus on building scalable systems and advancing spatiotemporal modeling. Currently applying engineering discipline as a co-founder of a technical solutions firm. Proven track record of deploying reliable software in high-stakes environments and architecting cloud-native solutions for early-stage ventures.

Education

2021 - 2025 BSc. (Hons.) in Computer Science, **FLAME University** **US GPA: 3.77/4.0**
Postgraduate Diploma in Interdisciplinary Studies **US GPA: 3.61/4.0**

Skills

Languages	Python, JavaScript, TypeScript, C++, C, SQL, Haskell
Frameworks	React Native, Next.js, NestJS, FastAPI, Supabase, Tailwind
AI/ML	PyTorch, TensorFlow, Computer Vision, ConvLSTM, RAG Architectures
Infrastructure	Docker, Linux (HPC/Air-gapped), Azure, GCP, PostgreSQL, Git

Work Experience

Co-founder & Lead Engineer, TriCatch *December 2025 - Present*

- Co-founded a technical solutions firm to build scalable digital products; bridging the gap between business requirements and technical architecture for early-stage ventures.
- Currently architecting a mobile fitness application for Movynn using **React Native** and **Supabase**.
- Leading full-cycle development while managing pre-release confidentiality; responsible for core infrastructure decisions and secure user data handling.
- Engineered an offline-first synchronization engine to ensure application functionality in low-connectivity environments.

Software Developer, Voltek AI *October 2024 - Present*

- Architected a knowledge ingestion pipeline for NANOLOY (Battery Research), consolidating terabytes of experimental data from SharePoint and Azure Blob Storage into PostgreSQL.
- Reduced query latency by 67% by optimizing database indexing and implementing a FastAPI middleware layer.
- Developed a Multi-LLM RAG system to allow researchers to query technical documentation using natural language, improving information retrieval efficiency.

Research Intern (SRTD), Space Applications Centre, ISRO *May 2023 - August 2023*

- Developed a ConvLSTM deep learning model for precipitation nowcasting using INSAT-3D satellite data, outperforming optical flow baselines by 30.7%.
- Operated in a high-security air-gapped environment; manually configured Linux environments and dependency trees for High-Performance Computing (HPC) clusters without internet access.
- Processed large-scale spatiotemporal datasets to train models for 6-hour rainfall prediction.

Student Research Assistant, CAI, FLAME University *March 2023 - March 2025*

- Managed the university's AI server infrastructure, implementing IAM policies for secure multi-user ML training workflows.
- Collaborated with ISRO to extend precipitation nowcasting research, leading to a thesis under review by Springer.

Project Solutions Intern, National Federation of the Blind *May 2024 - September 2024*

– Developed assistive navigation tools using Raspberry Pi and Computer Vision to aid visually impaired users.

– Conducted technical tutoring sessions at the **Jagriti School for Blind Girls** to improve digital literacy.

– Conducted field testing and user feedback sessions to refine hardware interaction designs.

Awards & Honors

Global Rank 1 **NeurIPS Weather4Cast Competition 2024** – Developed winning model for rainfall prediction.

Global Rank 2 **NeurIPS Weather4Cast Competition 2025** – Optimized architectures for sparse weather data.

Scholarships **60% Merit Scholarship** (2024-25) & **25% Merit Scholarship** (2021-24) for academic excellence.

Finalist **Bit N Build 2024** – Google Developer Student Clubs Hackathon.

Projects

Jyeshthanubandh *Play Store Link*

End-to-end safety application deployed with the **Pimpri-Chinchwad Police** for senior citizens. Features real-time GPS tracking, automated medical context retrieval, and a dedicated Command & Control dashboard for police operators.

PaudhaYodha *GitHub Repo*

Plant disease detection application built for the **Google Bit N Build Hackathon** (Finalist). Fine-tuned a ResNet-50 model on leaf imagery to identify crop diseases with 92% accuracy.

Leadership & Activities

President, DotSlash FLAME *2023 - 2024*

Led a team of student developers to build internal tools for the university IT department. Organized technical workshops and hackathons for 200+ students.

Technical Outreach, Project Impact *2024 - 2025*

Spearheaded digital literacy programs at **Z.P. School, Lavale**. Established a computer lab and developed curriculum for first-time computer users in a public school setting.

Technology Head, TEDxFLAMEUniversity *2024 - 2025*

Managed technical logistics for the conference; oversaw audiovisual delivery and website management for the university's licensed TEDx event.

Executive Committee Member, Student Clubs *2022 - 2025*

Served as Treasurer for the **FLAME Music Club**, **E-Sports Club**, and **The Reading Initiative**. Managed annual budgets and organized campus-wide cultural events for 1000+ students.

Publications

Deshpande, Atharva et al. (2024). *A conditional Generative Adversarial network model for the Weather4Cast 2024 Challenge*. arXiv: 2412.00451 [cs.CV]. URL: https://arxiv.org/abs/2412.00451.

Bhuskute, Anushree et al. (2025). *Computationally-efficient deep learning models for nowcasting of precipitation: A solution for the Weather4cast 2025 challenge*. arXiv: 2511.11197 [cs.CV]. URL: https://arxiv.org/abs/2511.11197.