

Vedant Deshmukh

+91 7977556263 | Mumbai | vedantdeshmukh3108@gmail.com | [GitHub](#) | [LinkedIn](#)

EDUCATION

Sardar Patel Institute of Technology

Bachelor of Technology in Computer Engineering — CGPA: 9.01/10

Mumbai, India

Jun 2021 – Jun 2025

EXPERIENCE

Software Engineer (AI Automation)

Growth Infi

Mar 2026 – Present

Mumbai, India

- Built a domain enrichment pipeline (company name → search → validation → ranking) using Next.js and PostgreSQL (Supabase), reducing manual prospecting time by 75%.
- Designed a multi-stage email verification system using syntax, MX, SMTP, and heuristic-based validation by integrating multiple open-source engines to improve deliverability accuracy.
- Developed an automated calendar invitation orchestrator using BullMQ and Node.js for high-volume scheduling, implementing exponential backoff, retries, and rate limiting to ensure reliable bulk invitation delivery.

AI Intern

DeepCytes CyberLabs (UK)

Jun 2024 – Dec 2024

Mumbai, India

- Developed deepfake detection systems using CNN-LSTM pipelines for audio and video, achieving 92% accuracy.
- Built a real-time inference and evaluation pipeline with end-to-end latency under 500ms.
- Optimized model inference and preprocessing pipelines, reducing latency by 30%.

Full-Stack Developer Intern

IIT Bombay

Jan 2024 – Jul 2024

Mumbai, India

- Designed and deployed a full-stack web platform (PHP, MySQL, JavaScript) for Indian language typing experiments, supporting 1000+ user sessions and concurrent study workflows.
- Developed dynamic admin dashboards to configure experiments, manage users, and control 10+ concurrent language studies in real time.
- Implemented automated data pipelines for computing typing metrics (WPM, CER, TER) and exporting structured datasets, reducing manual effort by 80%.

PROJECTS

FynVid - Scalable Video Streaming App | *MongoDB, Express.js, Kafka, React, Docker, NGINX* (Live) (GitHub)

- Engineered a scalable distributed video platform supporting concurrent users with features like upload, feed generation, and playlist management.
- Designed and implemented an event-driven, multi-instance backend architecture using Kafka for asynchronous processing of views, likes, and comments, enabling decoupled services and real-time notifications.
- Implemented JWT-based authentication using cookies and role-based authorization, and deployed multiple backend instances behind NGINX load balancing with Redis-backed distributed rate limiting.
- Optimized backend APIs using cursor-based pagination and database indexing, and integrated Cloudinary for efficient media storage and delivery, reducing response times by 40%.

IRS-Aided Jamming Detection Framework | *ns-3, C++, Machine Learning* (GitHub)

- Extended an ns-3 mmWave simulator with custom propagation models to support IRS-assisted communication for UAV base stations and mobile jammers.
- Developed data pipelines to extract SINR/RSSI time-series, training a CNN-LSTM model to detect jamming attacks with 87.26% accuracy.
- Implemented signal rerouting using Rician fading and path loss models to maintain link reliability under active interference.

SKILLS

Languages: C++, Python, Java, TypeScript, JavaScript, SQL, PHP

Frameworks: Node.js, Next.js, Express, React, Flask, FastAPI

Databases: MongoDB, MySQL, PostgreSQL, Redis

Concepts: REST APIs, Distributed Systems, Microservices, Authentication, Scalability, Rate Limiting, Caching

DevOps/Cloud: Docker, Kubernetes, AWS (EC2, S3), CI/CD, Git, Postman

Machine Learning: PyTorch, TensorFlow, Scikit-learn, NumPy, Pandas, Matplotlib