

Pratik Pakhale

Computer Science and Engineering
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EDUCATION

- **Indian Institute of Information Technology, Dharwad** 2021-2025
Bachelor of Technology in Computer Science and Engineering

EXPERIENCE

- **Raccoon AI** Dec '24 - Present
Founding Engineer (prev. Intern)
 - Shipped **Elemetry**, a **cache engine** that stores browser actions in an in-memory vector graph database, leveraging browsing history to accelerate repetitive tasks.
 - Designed dual-model (ephemeral events vs. persisted blocks) **real-time streaming pipeline** for frontend rendering of realtime agentic work.
 - Built a text-to-video motion-graphics system with a **React rendering engine**, director's-board approval flow, parallelized frame-by-frame export on serverless GPUs, and a full audio toolkit.
 - Also shipped canvas editor, raccoon-inspector, worked heavily on chat app's state management and performance.
- **Google Summer of Code | Pecan Project** Summer 2026 & 2024
Mentor & Contributor
 - **Mentor (2026):** Selected as a **GSoC mentor** for *LLM-Assisted Extraction of Agronomic and Ecological Experiments into Structured Data*, guiding a contributor through project scoping, technical design, and delivery.
 - **Contributor (2024):** Integrated a **JSON schema parser** into the FieldActivity R Shiny application, enabling validation and storage of management-event data.
- **Affect Aware System and QGIS LMS Platform | IIT Bombay** Summer 2023
Research Intern and Developer IIT Bombay
 - Developed an **advanced learning system** utilizing video bots for enhanced student engagement.
 - Implemented an adaptive feedback platform using React & ExpressJS, a Flask server running the deep learning model, and improved learning outcomes.
 - Built a software that can be executed locally using **Docker** or through an **Electron installation**.
 - Working on GeoGuru, a Learning Management System that incorporates a geographical information system. Working as the **lead backend developer** to build scalable APIs.

PERSONAL PROJECTS

- **Rewind** 2022
A social media platform powered with generative AI technologies solely built for music lovers.
 - * Primarily developed an AI-driven social media platform catered to music enthusiasts using TypeScript Node, React, and Python.
 - * Spearheaded the design and implementation of a **voice bot for enhanced website interaction**, including post-creation and advanced search functionalities.
- **Event Management** 2021
The complete event management website for club events from registering to ticketing.
 - * Solely created a one-stop online platform for managing club events, including registration and ticketing, using MERN stack, TailwindCSS, and Netlify Lambda.
 - * Successfully maintained errorless operation handling over 100k API calls.

TECHNICAL SKILLS AND INTERESTS

Languages: TypeScript, Python, Go, Java, C, C++, R, HTML, CSS
Tools: Docker, GitHub Actions, AWS and CI workflows
Frameworks: Nextjs, FastAPI
Databases: Vector, Graph, SQL, and No-SQL

EXTRAS

- **Lead:** Multiple Institute Websites (Full Next.js Turborepo) - iitdwd.ac.in
- **President:** Velocity, Web and App Development Club
- **Winner and Student Leader:** Postman Inc. Global Hackathon
- **Campus Rep:** Buildspace, Nights & Weekends