

Pratik Pakhale

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EDUCATION

- **Indian Institute of Information Technology, Dharwad** 2021-2025
7th Semester, Bachelor of Technology in Computer Science and Engineering

EXPERIENCE

- **Google Summer of Code | Pecan Project** 2024
Contributor
 - Integrating JSON data schema (management-event-schema) into FieldActivity R Shiny application, enabling it to read variable information from the schema and store management activity data in a compliant and flexible manner.
 - Addressing the challenge of storing multiple incidents for specific management cases, enhancing the data structure to support complex scenarios.
- **Affect Aware System and QGIS LMS Platform** 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 a scalable APIs.
- **Devforces | Quasarect Technologies LLP**
Co-founder and CEO
 - Making competitive development more fun and rewarding. Currently in Alpha.
 - EC2 and the T3 Stack
- **VIKRAM - Arthlex Research Private Limited** 2023-24
Lead Developer Remote
 - Directed the building process of vikrambots.ai, a platform that allows the creation and sharing of bots powered by LLMs.
 - Managed AWS EC2 hosting and **DevOps**, integrated NextJS with Typescript, Flask with **Langchain**, and Weviate **Vector Database**.
- **IKS Text Analytics** IIIT Dharwad
Research Intern
 - Executed successful data scraping of significant texts such as Bhagavad Gita, Vedic Hymns, Vedantas, and Ramayana in different languages, and used an effective **data mining algorithm using FP growth** in Scala, leading to the generation of associated rules after detailed pre-processing.
 - Constructed an **interactive client-side web platform** that showcases results through comprehensive graphics.
- **Institute Website** IIIT Dharwad
Project Lead
 - Led a team of 15 developers and designers using the Agile framework to build the new college website, **iiitdwd.ac.in**.
 - Successfully deployed the base version in less than 10 days. Currently developing a CMS to enhance website functionality and content management.

PERSONAL PROJECTS

- **vChar**

The AI researcher which researches across web to find the solution you are looking for

- Developed the RAG application completely local and with in-house tools for agents to use.
- Used llama3 and mixedbread embeddings for RAG, built a low-latency browser API for faster web querying and more.

- **Rewind**

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**

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 flawless operation handling over 100k API calls.

TECHNICAL SKILLS AND INTERESTS

Languages: TypeScript, JavaScript, Python, Java, C, C++, R, SQL, HTML, CSS, and Shell Scripting.

Tools: Docker, GitHub Actions, AWS and respective workflows

Frameworks: Nextjs, ReactJs, NextJs, NodeJs, Flask

Databases: Vector, SQL, No-SQL

ACHIEVEMENTS

- **Global Hackathon Winner** - Postman Go with the Flow Hackathon
- **Shark Tank IIIT Dharwad Winner** - Pitched DevForces, a platform to host development competitions.

POSITIONS OF RESPONSIBILITY

- **President:** Velocity - Web and App Development Club
Managed the teams, campus projects, and events held across the institute.
- **Student Leader:** Postman Inc.
Promoted API Literacy on my campus and held fun events like API Treasure Hunt
- **Campus Rep:** Buildspace
The campus representative for Buildspace's Nights and Weekends