Varnikumar Patel

Education

VIT Bhopal University

August 2023 - Present

B. Tech in Computer Science & Engineering (Artificial Intelligence and Machine Learning)

8.03/10 CGPA

• Coursework: Machine Learning, Artificial Intelligence, Deep Learning, Data Structures and Algorithms

Work Experience

AlgoUniversity (backed by Y-Combinator)

May 2025 - Present

Software Development Extern

Remote

- Developed an online judge platform using the **MERN stack React.js** for UI, **Node.js/Express.js** for backend, and **MongoDB** for data management allowing users to **submit** and **evaluate code solutions**.
- Built a secure and responsive interface using **React.** is, enhancing user experience and engagement.
- Engineered backend services with Node.js & Express.js for user auth, problem submission, and evaluation.
- Integrated a sandboxed **code compiler** to safely compile and run user-submitted code in an isolated environment.
- Received mentorship from senior engineers at Google London, Apple, Bytedance, and Alphagrep Singapore, gaining real-world software development and scalability experience.

Mittal Alliance Industries Private Limited

May 2025 - Present

Web Developer Intern

Remote

- Contributed to the front-end development of a modern web application using **React.js** and **Tailwind CSS**, improving mobile responsiveness by 40% and reducing load time by 30%.
- Implemented advanced animations using Framer Motion and GSAP, increasing user session time by 25%.
- Collaborated with the design team to convert high-fidelity Figma prototypes into responsive layouts, reducing UI iteration time by 35%.
- Optimized performance by refactoring components and minimizing re-renders, boosting render speed by 40%.

Projects

Code2Concept - DSA Learning Platform

Live Here

- Built Code2Concept with MERN, React.jsx, Tailwind CSS, and Gemini API for DSA solutions and video guides, achieving 95% user satisfaction rate.
- Designed Tailwind CSS UI for 50% faster access to DSA concepts, solutions, and limits.
- Integrated Gemini API for multi-solution DSA outputs and videos, cutting learning time by 30%.
- Created Node.js, Express.js, MongoDB backend with 99.9% uptime for DSA content delivery.

Technical Skills

Languages: Python, Java, C++, JavaScript

Frontend/Backend: React.js, Tailwind CSS, Node.js, Express.js, HTML, CSS, Bootstrap Cloud & Tools: AWS, Firebase, MongoDB, MySQL, Docker, Git, GitHub, Postman, VS Code

ML & Data Analysis: Scikit-learn, TensorFlow, Pandas, NumPy, Matplotlib, Seaborn, Power BI, Excel

Achievements & Leadership

Accelerator Programming Camp

March 2025 - Present

 $Batch\ of\ 2025$

AlgoUniversity (backed by Y-Combinator)

- Selected in the top 1.4% out of 40,000 applicants; mentored by senior engineers from Apple, Google, Grab Singapore, and Alphagrep Singapore.
- Learned to build scalable systems, perform deployments, and gained industry-level development experience.

Event Management Lead

November 2023 - Present

 $Gujarati\ Club$

Placement Office

 $VIT \ Bhopal$

VIT Bhopal

• Led cultural events, overseeing logistics, planning, and coordination among 10+ team members.

Placement Cell Member

November 2024 – Present

• Assisted in **TCS recruitment** coordination for 300+ students, managing interview logistics and communication.

Algorithmic Competitions/Achievements

- Solved **500+** DSA problems across **LeetCode** and **GFG**, including 160+ Medium/Hard problems, strengthening core problem-solving skills.
- Achieved a Coding Score of 1012 and secured Rank 297 at VIT on GeeksforGeeks with a 103-day max streak and the 100 Days Badge 2024.