Mehul Kumar

Gmail: mehul271102@gmail.com | Mobile: +91 7011873210 | GitHub: Mehul2711 | LinkedIn: mehulkumar27

EDUCATION

B. Tech in Computer Science Engineering (Software Engineering)

Sep, 2021 - Mar, 2025

CGPA: **8.8**

SRM University, Kattankulathur, Chennai

WORK EXPERIENCE

Fullstack Intern at NHPC LTD, Faridabad

Jun, 2023 - Sep 2023

- Enhanced UI performance by 20% through revamped user interface and modularized slider components with **ReactJS** and **TailwindCSS**.
- Optimized backend efficiency by implementing **RESTful APIs** with **Node.js** and **Express**, reducing data retrieval time and improving overall application performance.

Frontend Intern at Saraayat

Aug, 2023 - Nov, 2023

- Built an e-commerce application using **React.js**, **Node.js**, and **MongoDB**, optimizing performance to reduce latency and improve load time by 25%, resulting in enhanced user engagement and satisfaction.
- Engineered innovative solutions to optimize website performance and user experience.

PROJECTS

Drone Obstacle Avoidance System

Dec. 2023

• Engineered a drone navigation system using **OpenCV**, **NumPy**, and **DroneKit**, achieving 95% obstacle detection accuracy with stereo vision, reducing collision risk by 80%, and improving autonomous flight efficiency by 60%. <u>Github Repository</u>

The GitHelper, View

Oct, 2024

Built an AI-driven GitHelper chatbot using Next.js, leveraging keyword matching from a command file to explain Git commands with interactive inputs, achieving response times under 500 ms to assist developers and beginners effectively. Github Repository

Mass Mailer Sept, 2024

• Developed a Mass Mailer tool using **Node.js** and **SMTP**, optimizing asynchronous processing by **40%** to ensure efficient and reliable email delivery, making it ideal for newsletters, promotions, and scalable notifications. **Github Repository**

Hand Gesture Recognition System, View

Aug, 2024

• Designed and implemented a gesture recognition system using **Python** with **CNN** and **NLP** models, achieving **95%** detection accuracy and **20%** faster processing for real-time, efficient, and accurate gesture-to-text translation.

ImageGate, View

Oct, 2024

Developed ImageGate, a full-stack image retrieval application using Next.js, Express, and MongoDB, achieving 95% image retrieval accuracy with Pexels API integration and optimizing pagination to enhance load efficiency by 90% for seamless image browsing. Github Repository

SKILLS		
Programming Languages	Python, JavaScript, Java, SQL	
Frameworks & Libraries	Tailwind CSS, Bootstrap, Express.JS, Node.JS, React.JS, React Native, Next.JS,OpenCV, NumPy, DroneKit	
Databases	MongoDB, mySQL	
Tools	Git, Figma, Postman, Wordpress, Github, materialUI, JWT, oAuth, CI/CD, Git, Visual Studio	
Key Expertise	Data Structures and Algorithms, Object Oriented Programming, Operating, Algorithm Analysis, SDLC, Advanced problem solving	
Soft Skills	Team player, Effective communication, Problem Solving, Time Management, Adaptability	

CERTIFICATIONS	PROFESSIONAL PROFILES
Oracle Cloud Infrastructure 2023 Foundations Associate <i>Link</i>	Leetcode - https://leetcode.com/u/mehul271102/
Machine Learning Foundations, Issued AWS Academy <i>Link</i>	Codeforces - https://codeforces.com/profile/mehul271102
Python Certificate, Issued by NPTEL <u>Link</u>	Hackerrank - https://www.hackerrank.com/profile/mk3416
UI/UX Designer Certificate, Issued by Coursera Link	Portfolio - https://mehul2711.me

ACHIEVEMENTS

• Published a research paper at IEEE (ICoACT 2025) titled "Developing a CNN and NLP Integrated System for Translating ASL Into Human Language" View