# SUMIT KUMAR

### Summary

I am a driven Computer Science Engineer with strong skills in data structures, algorithms, and full-stack development. I have hands-on experience in building scalable applications, solving complex problems, and contributing in hackathons and team-based projects. Proficient in agile workflows and modern development practices, I am passionate about product engineering, cloud technologies, and AI-driven solutions. With a focus on innovation, business impact, and secure, efficient, high-quality software systems, I aim to help organizations scale and transform digitally.

## SKILLS

**Programming Languages**: C, C++, Python, Java, JavaScript, TypeScript **Libraries & Frameworks**: React, Next.js, Scikit-learn, Pandas, Numpy, Node.js

Tools & Platforms: Git, Vercel, GitHub Databases: SQL, MySQL, PostgreSQL

Other Skills: Excel, MS Word, PowerPoint, Canva, Figma

#### WORK EXPERIENCE

# IBM (Virtual)

Frontend Developer Intern

- Built and optimized responsive user interfaces using HTML, CSS, Javascript, and React.
- Collaborated in a virtual agile team, contributing to design discussions and development tasks.
- Enhanced user experience and accessibility through UI improvements and best practices.

# Defence Research and Development Organisation (DRDO)

Technical Intern

- Developed a **real-time magnetic field analysis tool** with a PyQt5 GUI for signal/noise comparison, FFT visualization, and sensitivity computation.
- Implemented **multi-threaded data processing** to ensure smooth live plotting and non-blocking user interaction.
- Added automated **CSV parsing, FFT-based spectrum analysis**, and export of per-second results for accurate B-field and sensitivity reporting.

#### PROJECTS

# AI-Powered Mock Interview Platform

- Built an AI-driven mock interview platform using **Gemini APIs**, offering real-time feedback on DSA, aptitude, reasoning, and soft skills.
- Integrated modules like **Resume Builder**, Aptitude Tests, and Interview Simulator with **Next.js**, **Clerk auth**, and **Tailwind CSS** for secure, responsive UX.
- Deployed on **Vercel** using **serverless architecture**, enabling **cloud scalability**, low latency, and predictive performance analysis.

## AI-Powered Health Report Translator

- Developed an OCR and NLP-based tool that translates complex medical jargon into simplified, multilingual content for better health understanding.
- Integrated **risk scoring**, contextual summaries, and doctor recommendations-beneficial for **defense and rural healthcare** systems.
- Focused on **secure data handling**, offline accessibility, and **Al-based health trend prediction** to support wellness monitoring.

## EDUCATION