AMAN KUMAR SINGH

Bhopal , Madhya Pradesh , India

☎ +91-7780658265 ✉ amankumarsingh.org@gmail.com 🔗 Linkedin ⌂ Github

EDUCATION

VIT Bhopal   **2022 – 2026**
B.Tech - Computer Science and Engineering (Minors in Cybersecurity and Digital Forensics)   *CGPA- 9.2*

COURSEWORK

Data Structure and Analysis of Algorithm
Methodologies & Concepts: MERN Stack, Git, Amazon Web Services and Architecture
Technologies/Framework/Practices: React, Node.js, SDLC, Security, Application Resiliency
Coursework: Object-Oriented Programming, Computer Networks, Database Management Systems, Operating Systems, Software Engineering, Web Security , Engineering Design and Modeling, AWS Cloud Practioner , AWS Solution Architect

PROJECTS

AMSTOCK – Cloud-Native Inventory Management Platform with AWS Architecture   **[Apr 2025 - Jun 2025]**
- Designed a cloud-native inventory management system using **AWS**, **Next.js**, **Node.js**, and **PostgreSQL**, with complete separation of frontend and backend services.
- Deployed backend via **AWS EC2** with **PM2**, and provisioned a fault-tolerant **Multi-AZ RDS PostgreSQL** instance for high availability.
- Integrated **AWS Amplify** for frontend CI/CD and managed static image uploads through **AWS S3** with signed URLs for secure access.

ShadowStamp – Blockchain-Based Invisible Watermarking Platform   **[Feb 2025 – Apr 2025]**
- Designed a secure content authentication platform using **Solana blockchain** and **SHA-256** for tamper-proof verification.
- Integrated **YOLO** and **OpenCV** to embed invisible watermarks in media files, preserving content integrity.
- Developed responsive UI with **React**, **TailwindCSS**, and **TypeScript**, enhancing user interaction.
- Enabled watermark reveal via **Augmented Reality (AR)** using **Vuforia/ARCore** with a real-time dashboard.

SKILLS AND CERTIFICATIONS

Languages, Frameworks & Tools: C++, HTML5, React JS, CSS, PostgreSQL, Version Control, GitHub

Certifications:
- Certified **Cybersecurity Analyst**   *Issued by **IBM**, 2025*
- Certified **MERN Stack Developer**   *Issued by **Ethnus**, 2025*
- Certified **(C100DBA) Database Administrator Associate**   *Issued by **MongoDB University**, 2025*

ACHIEVEMENTS

- Top-5 Finalist in **Anti-Piracy Hackathon** Organized by World Audio Visual Entertainment Summit for ME Industry and Conducted by Ministry of Maharashtra.
- Solved over **450+ algorithmic challenges** on platforms like LeetCode and GeeksforGeeks, enhancing problem-solving and DSA skills.
- Completed Successfully contributed to four open-source repositories during **Hacktoberfest 2024**.

LEADERSHIP SKILLS

Team Lead at Mozilla Firefox Club, VIT Bhopal
- Organized 5+ hackathons and coding events, increasing participation from 100 to 300+ students.

Member of Discipline Committee at VIT Bhopal
- Ensured smooth conduct of campus activities by maintaining order during official events and enforcing institutional code of conduct.