# Aman Kumar Singh

Bhopal, Madhya Pradesh, India

#### Profile

Innovative Software Engineer specializing in AWS Cloud Solutions, Full-Stack Development, and AI Systems, with hands-on experience in SaaS Platforms, Multimodal AI, and Serverless Architectures.

#### Education

VIT Bhopal 2022 – 2026

B. Tech - Computer Science and Engineering (Majors in Cybersecurity and Digital Forensics)

CGPA- 9.2

#### Technical Skills and Courses

#### Data Structure and Analysis of Algorithm

Technologies/Framework/Libraries: HTML, CSS, Machine Learning, Git

Coursework: Computer Networks, Operating System, Database and Management System, Object Oriented Programming, Data Structures and Algorithm, Theory of Computation and Compiler Design, Principles of Digital Forensics, Web Security, Amazon Web Services, Artifical Intelligence and Machine Learning, Engineering Design and Modelling, Cyber Threat and Analysis, Software Vulnerability Testing, Software Engineering

# Work Experience

### The Red Users – Cybersecurity Intern

Jan, 2025 - Feb, 2025

- Conducted network security analysis, identifying and mitigating threats using firewalls & Wireshark, improving system security.
- Executed web vulnerability testing with OWASP ZAP & WebGoat, successfully detecting critical vulnerabilities, including SQL Injection, XSS, and CSRF attacks.

#### **Projects**

# $\underline{KinderConnect-AI-Powered\ Child\ Psychiatrist\ Portal\ } \ \ |\ MERN)$

Nov, 2024 - Jan, 2025

- Conducted multiple successful demonstrations of the KinderConnect portal to key stakeholders, gathering requirements and feedback that improved interface stability.
- Engineered a MERN-stack child psychiatrist appointment portal with integrated AI chat assistant, significantly
  improving scheduling efficiency and user engagement.
- Visit Project

## Scalable Inventory Management System Using AWS [2] | AWS, Next. js, RDS Mar, 2025 - Present

- Designed cloud architecture with VPC networking, public/private subnets, and security groups for secure and available infrastructure
- Implemented relational database schema for comprehensive tracking of products, users, and transactions
- Integrated AWS Amplify with Next.js frontend to establish automated deployment workflows

# Multimodal AI SaaS Platform 🗷 | Amazon SageMaker, Next.js 15, Tailwind CSS — Apr., 2025 - Present

- Developing image/text classification and object detection models using SageMaker
- Architecting multi-tenant SaaS infrastructure with scalable EC2 configuration
- Core AI Orchestration Implementation In Progress...

#### Certifications

- Certified Cybersecurity Analyst [Issued by IBM 2025]
- Certified MERN Stack Developer [Issued by *Ethnus* 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.
- Completed 365/365 Days of Coding Consistency Challenge, solving 500+ algorithmic problems across platforms like LeetCode, GeeksforGeeks, and HackerRank while mastering data structures and optimization techniques.