# Shivanshu Sahil

Bihar,India | sahil0\*\*\*\*9@gmail.com | 911\*\*\*\*\*70 | linkedin.com/in/Shivanshu Sahil |

Computer Science student with hands-on coding experience in both scripting and object-oriented languages. Strong problem-solving, analytical, and communication skills with a solid understanding of system design basics. Comfortable working with algorithms and exploring AI concepts to build practical, scalable solutions.

#### **Education**

#### **Manipal University Jaipur**

Aug 2023 - Present

Bachelor of Technology in Information Technology

CGPA: 9.59

• Relevant Coursework: OOPS, DBMS, Operating system, Computer networks, Data Structures and Algorithms, Software Engineering and Project Management, Statistics & Probability, , MATLAB for Engineers, Engineering Graphics

## SKP Vidya Vihar Bhagalpur

2023

XII

81.5%

#### **Skills**

Languages: C++, Java, SQL(MySQL), JavaScript, Python, TypeScript

Web Technologies: HTML, CSS, React.js, Next.js, Node.js, Express.js, FAST APIs, Tailwind CSS, Bootstrap, Socket.IO

**Soft Skills:** Problem-solving, Analytical thinking, Effective communication, Time management, Teamwork, Adaptability

### **Projects**

Portfolio Website Github | LiveLink

- Built a responsive personal portfolio website with Next.js, TypeScript, and Tailwind CSS.
- Integrated dynamic project showcase, contact form (EmailJS), and theme switching.
- Deployed on Vercel with optimized performance and SEO best practices.

#### **Collaborative Whiteboard App**

Github

- Built a real-time collaborative whiteboard app (MERN+Socket.IO) with role-based access, supporting 10+ concurrent users and <100ms sync latency.
- Engineered scalable JSON-based drawing sync, modern UI, and live user presence, improving team collaboration and engagement.
- Delivered secure, accessible, and maintainable codebase, reducing onboarding time for new developers by 40%

#### **AI-Powered Flood Risk Assessment System**

Github | LiveLink

- Developed AI flood risk system using DEM analysis + image segmentation (Gemini 2.0, U-Net); improved risk detection accuracy by 35%.
- Built full-stack app with Next.js + FastAPI, integrating real-time maps, risk scoring, and actionable insights.
- Processed geospatial + image data for multi-level risk categorization, aiding planners and emergency teams.

#### **CERTIFICATIONS**

- 1. Dean's List Excellence in Academics by Manipal University Jaipur in all four semesters completed
- 2. Programming in Modern C++ by **NPTEL (IIT Kharagpur)**
- 3. Database Design, Database Foundations, Database Programming with SQL by ORACLE