# AJAY NEGI

## Work Experience

### **Infosys Springboard**

October 2024 – December 2025

Software Developer Intern

- Developed ShieldMe, a full-stack emergency response and mental well-being application, along with a centralized admin panel for efficient user data management, enhancing system control.
- Designed and implemented 4 distributed backend microservices using Spring Boot, Kafka, MongoDB and built a responsive React frontend, integrating authentication, geolocation tracking, journaling, SOS alerts, and a centralized admin panel for enhanced system efficiency.
- Improved application reliability by 90%, resulting in fewer system errors and crashes, by implementing advanced error handling and centralized logging mechanisms across all microservices.

#### GirlScript Summer of Code

October 2024 - October 2024

Project Admin

- Reviewed and managed 200+ issues and 100+ pull requests, merging 40+ high-quality contributions to improve code reliability and maintain project standards in an open-source community.
- Mentored 50+ contributors by providing constructive feedback, resolving technical challenges, and coordinating tasks to achieve timely project milestones.

## **Projects**

#### Uttarakhand Culture Preservation Project | Next.js, PostgreSQL

Live Link

- Younger generation in Uttarakhand is increasingly disconnected from their cultural heritage, with each generation retaining less knowledge than the last, putting the region identity and traditions at risk.
- Built an interactive digital platform that documents Uttarakhand rich cultural heritage by digitizing its language, festivals, treks, stories, art, history and more. This project is my heart and purpose.
- Currently serving 100 active users, with growing user base and increasing engagement on cultural content

#### Vayu - Web Server | Java, Netty, Grafana K6, Docker

Source Code

- Developed Vayu, a high-performance, lightweight Java web server using Netty, designed for scalability, rapid data transfer, and minimal resource consumption.
- Leveraged Netty asynchronous event-driven architecture to efficiently handle high concurrency with non-blocking I/O, using Grafana K6 for performance testing and optimization.

#### Old School Game | Next.js, Artificial Intelligence

Live Link

• Recreated nostalgic games using AI-powered Minimax algorithm to deliver engaging human-vs-AI gameplay while promoting cognitive skill development.

## Leadership & Extracurricular

- Award: Led a team that won 1st place out of 70 teams in a 24-hour Hackathon, by developing a healthcare accessibility platform for nearby govt. medical facilities and generic medicine identification.
- Community Builder & Coach: Spearheading the Uttarakhand Culture community, building a platform to preserve cultural values, learn from traditions, and share knowledge with future generations.
- Certifications: Postman API Fundamentals Student Expert by Postman, Programming using Java by Infosys, Certified Kubernetes Application Developer (CKAD) by KodeKloud
- Newsletter: Author a monthly blog, Codies Coder, exploring software engineering topics in-depth. link

#### Technical Skills

Languages/Lib/Frameworks: Java, Spring Boot, JavaScript, Reactjs, Nextjs, HTML/CSS, JUnit

Technologies: Docker, Linux, Kubernetes, AWS, Git, Github, Kafka, Grafana K6

Databases: MySQL, PostgreSQL, MongoDB

#### Education

#### IITM College of Engineering

July 2022 - May 2025