Gulshan

Fazilka, Punjab, India | gulshan1001v@gmail.com | +91 8968319641 | linkedin.com/in/gulshanvinayak1

Education

M.Tech in Signal Processing and Machine Learning   *2024 - 2026*
Dr. B.R. Ambedkar National Institute of Technology Jalandhar (NIT Jalandhar)

B.Tech in Electronics and Communication Engineering   *2020 - 2024*
Dr. B.R. Ambedkar National Institute of Technology Jalandhar (NIT Jalandhar)

Experience

Junior Web Developer   *June - July 2023*
Pinpencil LLP, Remote (Mohali)

- Developed and deployed customizable portfolio templates using HTML, CSS, JavaScript, and Bootstrap, enabling users to generate personal websites effortlessly.
- Contributed to the end-to-end design workflow—from wireframing to responsive UI implementation—on platforms like GitHub, Vercel, and Netlify.
- Gained practical exposure to open-source development, enhancing coding proficiency and understanding of real-world web design challenges like color schemes and typography balance.

Projects

Brainstorming   *[Repository Link]*
Tech Stack: Java, Spring Boot, Apache Kafka, MongoDB, MySQL, Redis

- Built a scalable competitive programming platform inspired by LeetCode and Codeforces for hosting contests, evaluating skills, and assigning performance-based ratings using a microservices architecture.
- Integrated Apache Kafka for load distribution and deployed multiple code-testing servers, reducing code evaluation wait times by 80%.
- Used Redis as a caching layer, enhancing system responsiveness by 40%. Designed modules for live contests, practice problems, and real-time feedback to improve user engagement and learning.
- Developed secure admin tools with Spring Security, enabling role-based access for contest management, problem uploads, and an automated Elo Rating system for transparent performance tracking.

Gemini Talker   *[Repository Link]*
Tech Stack: Python, Gemini API, Google Translate API, Dialogflow, Firebase

- Developed an AI-powered multilingual chatbot to assist students during JEE Mains counseling by predicting ranks and guiding college selection based on real-time JOSAA data..
- Trained the chatbot using machine learning models and past year trends to provide accurate and contextual college recommendations, improving decision confidence for aspirants.
- Integrated support for multiple Indian languages using Google Translate and NLP techniques, significantly increasing accessibility for regional students.
- Deployed the system using Dialogflow and Firebase, ensuring real-time interaction, session continuity, and secure data handling throughout the counseling process.

Key Skills

Programming Languages: C/C++, Java, Python, JavaScript (Basics)
Frameworks: React.Js, Node.Js, Spring-boot
Databases & Tools: MySQL, MongoDB, Redis, Git, GitHub
Core Competencies: System Design, Data structures and Algorithms, Competitive Programming
Course works: Operating System, Object Oriented Programming, Machine Learning

Achievements

- **LeetCode Practice:** Solved **250+ questions**, strengthening problem solving skills.
- **Best Final Year Project:** Awarded for outstanding project execution.
- **Regional Languages Club:** Established and led a club with more than **300 members** promoting linguistic and cultural diversity.