Vaibhav Singh
B.Tech and M.Tech Computer Science & Engineering
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Leetcode Profile
LinkedIn Profile

EDUCATION

•**National Institute Of Technology, Hamirpur** *2019-2024*
B.Tech + M.Tech, Computer Science and Engineering CGPA: 8.28

•**VidyaGyan Sitapur** *2018*
Senior Secondary School (XII), CBSE Percentage: 94.6

•**VidyaGyan Sitapur** *2016*
Secondary School (X), CBSE CGPA: 10

EXPERIENCE

•**Infosys Limited** *July 2024 - Present*
Specialist Programmer L2 Bangalore

- Developed an **agentic framework** for a learning platform, leveraging **LangGraph, LangChain**.
- Implemented features for dynamic course retrieval, personalized quizzing, learning planner and conversational task automation.
- Utilized LLMs, tools, and function calling to streamline user interaction and improve learning outcomes.
- Contributed to increased user engagement and enhanced learning efficiency.

•**Bosch Global Software Limited** *Jan 2024 - June 2024*
Student Trainee Bangalore
- Worked on **ADAS** vehicle parking feature.
- Resolved the harsh breaks in vehicles when faced with obstacles.
- Implemented the **PID controller** class for smooth breaking in C++
- Improved the efficiency of Localization while parking using the Kalman Filter from **80% to 95%**.
- Extended the design for object detection to increase the success rate of successful parking.

PERSONAL PROJECTS

•**Language Translator** *July 2022- Apr 2023*
NMT based language translator for eng-hin translation

- NMT based language translator for ENG-HINDI translation, achieving an 16-point BLEU score.
- Developed it using OpenNMT, Anaconda, and Google Colab.
- Trained a Long Short-Term Memory (LSTM) algorithm to refine model accuracy.
- Presented final results in a submitted research paper.

•**Health Appointment**
Helps in getting appointment of the Doctor

- Developed a complete web application from scratch for users to book appointments with doctors , or a user can apply as a doctor.
- Designed and implemented an intuitive admin panel to manage users and doctor approvals efficiently.
- Implemented user roles to differentiate between regular users and doctors, allowing users to apply for doctor status and administrators to approve doctor applications.

TECHNICAL SKILLS AND INTERESTS

Languages: C++, Python, SQL, Spark, PySpark
Backend: Kafka, Hadoop, Azure, AWS
Developer Tools: Git, VS Code, Jupyter, Colab, PostMan
Areas of Interest: Software Development, Artificial Intelligence, Generative AI, NLP

ACHIEVEMENTS

•**Gate 2023** Qualified the gate examination *2023*

•**JEE Mains** Secured All India Rank under 10k *2019*