Kumar Abhishek

📞 +91 9608013812 | ✉ abhishek.kr0418@gmail.com | 🔗 linkedin.com/in/kumar-abhishek-6b5828288
| ⓞ github.com/kumarAbhishek2004 | 📍 Una, India

Summary

Ambitious **Electronics and Communication Engineering** student passionate about **Machine Learning**, **Data Science**, and **Deep Learning**. Skilled in building data-driven solutions, deploying ML models, and optimizing performance. Seeking an internship to apply technical expertise, work on impactful projects, and expand professional experience in AI and software development.

Projects

InterviewBot – AI-Powered Interview Preparation Platform ⓞ

- Developed intelligent interview preparation platform with AI chatbot using **Google Gemini** and **LangGraph** for contextual, natural interactions.
- Implemented **RAG system** using ChromaDB for vector similarity search and integrated **LangChain-based resume parser** to extract skills and generate personalized interview questions.
- Integrated progress dashboard with **PDF report generation** using ReportLab.
- **Tech Stack:** FastAPI, LangChain, LangGraph, LangSmith, Google Gemini, ChromaDB, MongoDB, React, Redux Toolkit, PyTorch

ECG R-Peak Detection – Signal Processing & Deep Learning ⓞ

- Implemented multiple R-peak detection approaches using MIT-BIH dataset and compared classical and deep learning methods.
- Achieved **99.5% sensitivity** with Pan-Tompkins algorithm and **99.7%** with Inception-Residual UNet (RPNet).
- **Tech Stack:** PyTorch, Numpy, SciPy, Scikit-learn, Matplotlib, PyWavelets

CureGPT – AI-based Medicine and Cure Assistant ⓞ

- Designed AI-powered assistant for medicine details, related diseases, and home remedies.
- Integrated **BERT** for NLP tasks and deployed using PyTorch.
- **Tech Stack:** PyTorch, Pandas, BERT

Education

B.Tech in Electronics and Communication Engineering, IIIT Una
CGPA: 7.78

Class 12 (CBSE), Delhi Model Public School
Marks: 85%

Class 10 (CBSE), D.A.V. Public School
Marks: 92.4%

Technical Skills

Programming: Python, HTML, CSS, JavaScript
Libraries/Frameworks: Numpy, Pandas, Seaborn, Matplotlib, PyTorch, Streamlit, Scikit-learn, LangChain, LangGraph, LangSmith, FastAPI, SciPy, Redux Toolkit
ML/DL: Machine Learning, Deep Learning, NLP, Transformers, RAG, Signal Processing
Tools: GitHub, Jupyter Notebook, Matlab, Power BI, MongoDB, ChromaDB, MCP
Others: Data Mining, PCB Design, API Development

Languages

Hindi: Native
English: Proficient

Activities & Honors

- Member, Technical Club (**AAVESH**)
- Member, Literature Club (**EUNOIA**)