



NAKUL

Bachelor of Technology
in Electrical Engineering
Indian Institute Of Technology, Ropar

+91- 9817825464
2022eeb1192@iitrpr.ac.in
GitHub | Portfolio
linkedin.com/in/nakul-750121258/

EDUCATION

Degree	Institute/Board	CGPA/Percentage	Year
Bachelor of Technology	Indian Institute of Technology, Ropar	6.72 (Till 4th Sem)	2022-2026
Senior Secondary	Board of School Education Harayana	10	2021
Secondary	Board of School Education Harayana	9.8	2019

EXPERIENCE

- Project Management Intern** from Dec 2024 still going on
Under the guidance of DC of Rupnagar
 - Working under the guidance of Sh. Himanshu Jain, IAS.
 - Strategic Planning: Developing innovative strategies to modernize and enhance a school and the District library.
 - Execution of Plans: Implementing actionable steps to achieve overall development and growth.
 - Focus on Modernization: Introducing modern tools, technologies, and practices to improve infrastructure and functionality.
 - Comprehensive Development: Ensuring progress in education, resources, and community engagement.
- ATL teacher training Program** finished in Dec. 2024
With PES NGO and DC Ropar collaboration **Certificate**
 - Conducted training sessions for over 50 teachers as part of the ATL (Atal Tinkering Lab) initiative.
 - Guided educators on effectively utilizing ATL materials to promote technology and science education among students.
 - During this month, I gained introductory knowledge of the RFSoc board. I explored its functionality and performed a demo of its working.
- Indian Institute of Technology** from 23 may to July 2024
Intern under prof. Brijesh Kumbani
 - Engaged in the development and implementation of a wireless communication radar system using FPGA technology.
 - Worked with 4x2 RFSoc hardware to enhance system performance and capabilities.
 - During this month, I gained introductory knowledge of the RFSoc board. I explored its functionality and performed a demo of its working.

PROJECTS

- LORA communication shield for mobile phone** 2024
Tinkering Lab GE-107 **Github**
 - it involves developing a communication shield that enables Long Range (LoRa) communication capabilities for mobile phones. It extends the communication range of mobile devices using LoRa technology, facilitating long-distance data transmission.
- Span Email Prediction** 2024
Self assigned **Github**
 - Developed a machine learning model to classify emails as spam or non-spam using logistic regression. This project involved extensive data preprocessing, feature selection, model training, and evaluation, culminating in a robust spam detection system.
 - Tools and Technologies Programming Language: Python Libraries: Scikit-learn, Pandas, Numpy, NLTK/Spacy
 - Achievements: Successfully developed a logistic regression model with high accuracy in spam detection.
- Movie Recommendation System** 2024
Self Assigned **Github**
 - Developed a movie recommendation system utilizing collaborative filtering techniques to provide personalized movie suggestions based on user behavior and preferences. This project focused on leveraging user-item interactions to predict movie ratings and enhance recommendation accuracy.
 - Tools and Technologies Programming Language: Python Libraries: Pandas, NumPy, Scikit-learn
 - Achievements: Successfully deployed a machine learning-driven movie recommendation system. Improved user engagement and satisfaction through personalized and accurate movie suggestions.
- Education Bank: Gateway to Educational Empowerment** 2024
HS202-Human-Geography-Societal-Needs **Github**
 - This platform offers access to various free resources, including prominent platforms such as MIT OpenCourseWare and Swayam portal. Additionally, it provides links to AI tools designed to enhance students' learning experience, thereby facilitating their academic endeavors.
 - This website serves as a valuable resource for engineering students by offering comprehensive study notes tailored to their academic needs.

SKILLS

- Programming Languages:** C/C++, Basic Python, Numpy, Pandas, HTML, Verilog, undastable CSS
- Other:** Public Speaking, Management, project Planing , project management, Team work, Leadership, Communication, Understandable Machine Learning , Arduino

KEY COURSES TAKEN

- **Electrical:** Signals ans Systems, Basic Electronics, Digital Circuit,Material Science For Electrical and Electronics Engineers,Circuit Theory, Electromechanics
- **Math:** Probability and Stochastic Processes, Differential Equations, Linear Algebra and Calculus

POSITIONS OF RESPONSIBILITY

- **Leadership Role in PES Outreach Team,** 2024 - 2025
- Session Coordination and Planning, Quality Assurance through Demo Sessions,Motivating and Mentoring Team Members, Promoting Outreach and Impact

MISCELLANEOUS

- **Member oF ATL’s MISSION,**ATL’s Labs Renovation with partnership of MLA and PES. 2022-2023
- **Volunteer of the month,** Certified as the volunteer of the month, by Pehchaan Ek Safar, IIT Ropar 2023