



Alekh Kumar Verma

Bachelor of Technology
Electrical Engineering (Major in Electric Vehicle)
Rajiv Gandhi Institute of Petroleum Technology

LinkedIn

EDUCATION

Rajiv Gandhi Institute of Petroleum Technology

B.Tech. in Electrical Engineering (Major in EV)

Jais, Amethi

2022-26

EXPERIENCE

GYANARPAN VOLUNTEERING

Educational Volunteer

- Created comprehensive study materials, including modules, question papers with answers, and summaries, to simplify complex topics for underprivileged students.
- Helped students improve their understanding and excel in examinations by providing easily accessible learning resources.
- Conducted interactive study sessions and one-on-one tutoring to reinforce key concepts and provide personalized learning support for students with varying learning needs.
- Continuously updated and refined study materials based on student feedback and performance to ensure the resources remained relevant, engaging, and aligned with their learning needs.

PROJECTS

DC-DC Converter for LED Lighting of E-Vehicles

August 2024 – Present

"Evaluation of the Optimal Converter for LED Lighting in Electric Vehicles"

- **Tools & technologies used:** SimuLink, MATLAB.
- Acquired in-depth knowledge of different types of DC-DC converters used in LED lighting systems for electric vehicles.
- Gained insights into the operation of the LC3L resonant DC-DC converter as an automotive LED driver.
- Conducted detailed performance analysis of various DC-DC converter topologies, evaluating their efficiency, thermal management, and response under dynamic load conditions in automotive LED applications.
- Collaborated in designing and testing advanced control strategies for optimizing the power delivery of DC-DC converters, ensuring minimal electromagnetic interference (EMI) and enhancing overall system reliability in electric vehicle lighting systems.

KEY COURSES TAKEN

Electrical Machines, Power Electronics, Signals and Systems, Engineering Graphics, Digital Circuits and Systems, Network Analysis and Synthesis, Control Systems, Fundamentals of Electric Vehicle

TECHNICAL SKILLS

Programming: C, Python, Java, MATLAB

Tools & OS: MS Office, MS PowerPoint, MS Excel, AutoCAD, SimuLink, Windows

Web Skills: HTML, JavaScript

ACHIEVEMENTS

Secured Runner-Up Position in Intramural Sports at RGIPT

2023

Achieved 2nd Place in Inter-School Running Competition

2018

POSITIONS OF RESPONSIBILITY

Teaching Volunteer Gyanarpan Project Amethi

April 2023–June 2023