

Yuvraj Kumar

+918595238085
yuvraj.kumarr2401@gmail.com
Yuvraj Kumar

EDUCATION

Rajiv Gandhi Institute of Petroleum Technology (An Institute of National Importance) -Jais,UP

Bachelor of Electrical Engineering

November 2022 – April 2026

- Major in E-Vehicle

Hope Hall Foundation School - R.K Puram , New Delhi

CBSE Grade 12th - Percentage - 80.4

CBSE Grade 10th -Percentage - 77

April 2014 – June 2022

PROJECTS

BLDC Motor-Powered Bicycle Design and Development

July 2024

Self

- Developed a comprehensive Simulink model of a BLDC motor-powered bicycle, integrating precise electrical dynamics such as stator flux linkage, back-EMF, and electromagnetic torque.
- Designed a closed-loop PID control system for real-time speed control, utilizing multi-sensor feedback for voltage, current, and rotor position.
- Optimized motor performance considering nonlinear losses and dynamic load variations.

Modeling and identification of DC-DC buck converter

Ongoing

Mentor: Dr. Saurabh Pandey

- Developing a detailed model of a DC-DC buck converter, focusing on system identification techniques to enhance performance analysis.
- Implemented simulations to validate efficiency and dynamic response under various load conditions.

SKILLS

- Machine Learning , Python, C , C++ , SQL
- MATLAB(Intermediate), Simulink (Electrical Circuits), AutoCAD (2D 3D)
- **Libraries** : Numpy, Pandas,Seaborn,Matplotlib

COURSEWORK

Signals and Systems

Digital Circuits and Systems

Power Electronics

Control Systems

Sensors Actuators and Control(EV)

Electrical Machines

ACHIEVEMENTS

- Earned the "almost champion" title in the Egg Drop Challenge at Ujryotsav, RGIPT's tech fest *Nov 2023*