# **SHIVAM RAJ**

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### **SUMMARY**

Hi, I'm Shivam Raj currently pursuing Electronics Engineering at Rajiv Gandhi Institute of Petroleum Technology. I'm passionate about learning, teaching and the open flow of knowledge. I want to help build new and innovative things that solve real world problems on a large scale. I Qualified JEE Advanced (among the top 2%) and JEE Mains. I achieved a Dept. Rank 5 with overall CGPA of 8.35 in Department of Electrical & Electronics Engineering, RGIPT.

I'm well-versed in programming languages, especially Python, which I use extensively in my projects and research work. I have keen interest in data science, applications of AI/ML especially in security and robustness of communication system and other potential application also. I'm excited about the potential of AI/ML to transform the world and believe that my skills, knowledge and dedication will allow me to make a meaningful contribution to this field.

### **EXPERIENCE**

**Training** 

26th May-Present

Undergoing Summer Training in Oil and Natural Gas Corporation, Dehradun

# **PROJECTS**

# Application of ML for detecting SSDF attack in Cognitive Radio Systems

Rajiv Gandhi Institute Of Petroleum Technology • May 2023 - Present

- · Working on an algorithm based on Proximal Policy Optimization(PPO) to defend against SSDF attack.
- Working on application of ML on the smaller overlapping groups of SU(Secondary User) energy data, thereby increasing the detection performance particularly for multiple malicious users (MUs)

### FLEXIBLE LITHIUM ION BATTERY

Rajiv Gandhi Institute Of Petroleum Technology • August 2022 - March 2023

- · Studied about different ionic and polymeric materials which shows piezoelectric and pyroelectric effects.
- $\boldsymbol{\cdot}$  Developing a battery which is comparatively light in weight and durable .
- · Can be used in the manufacture of wearable electronics, flexible electronics and implantable medical devices .

### **EDUCATION**

### **Bachelor Of Technology In Electronics Engineering**

Rajiv Gandhi Institute Of Technology (2021-25) · Amethi , Uttar Pradesh · 8.35 CGPA (till 4th semester)

# Intermediate

Teresa International School • Patna, Bihar • 2021 • 89./.

### Matriculation

Gyan Niketan School · Patna, Bihar · 2019 · 91./.

#### **ACHIEVEMENTS**

Built a Line Follower Bot that can detect and follow the line drawn on the floor of any arbitrary shape (under TRABOTRON Event organized in the institute) and won that competition as well. (31May'22)

Participated in the HPCL Ideation Contest and also got the All India rank 4 and won the Commendation prize.

### INVOLVEMENT

### Operations And Logistics Co-Head

Jais, UP · IEEE, RGIPT · December 2022 - Present

- Operations and logistics focuses on making sure that the right amount and quality of materials and goods are produced and delivered to the correct recipients according to schedule
- The work involves production and service operations, with operations and logistics workers responsible for managing the supply chain, from purchasing raw materials to the production cycle to end delivery.

### **SKILLS**

- Programming Languages : C,PYTHON
- Software Packages: MATLAB (BASIC PURPOSE ONLY), AutoCAD
- Hardware Description Language : Verilog(learning)
- Platforms : Arduino, Windows, LINUX
- EDA Tools: PSpice
- · Soft Skills: Leadership, Event Management, Communication skills (English and Hindi- read, write and speaking)