Rajanya Shrivastava

Junior
Electrical and Electronics Engineering
Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi

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Rajanya Shrivastava

Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech., EE	Rajiv Gandhi Institute of Petroleum Technology, Jais, Amethi	8.63 (till 4th Sem)	2026
Senior Secondary	Chapra Central School, Chapra/CBSE/	93.8	2021
Secondary	Chapra Central School, Chapra/CBSE	93.8	2019

Projects (Ongoing)

- **3-tier VLC Network Data Rate Optimisation** *April 2024 - till date*
  Supervisor: Dr. Shivanshu Shrivastava
  - Utilized machine learning techniques to optimize data rate in a 3-tier VLC network.
  - Developed a model that predicts the maximum data rate achievable under varying network conditions.
  - Analyzed network performance across multiple tiers to identify key factors influencing data rate.
  - Achieved significant improvement in data rate by fine-tuning parameters using the ML model.
- **VLC Networks and Energy Harvesting** *September 2024 - Till Date*
  Supervisor: Dr. Shivanshu Shrivastava
  - Integrated a 3-tier network model with energy harvesting mechanisms to enhance overall system efficiency.
  - Investigated energy harvesting techniques to power network nodes and reduce dependency on external power sources.
  - Applied machine learning algorithms to predict optimal energy harvesting configurations and minimize latency in network operations.
  - Showcased potential use cases for sustainable network operations by leveraging harvested energy in resource-constrained environments.

Scholastic Achievements

- Top Ranker: From LKG to 12th
- Top 5 Ranker: B.Tech, EE (Till 4th Semester)
- National Level Finalist: Represented Bihar in 25th NCSC, Ahmedabad
- Gold Medalist: SOF Olympiads
- Finalist: Dark Patterns Buster Hackathon-2023, IIT-BHU

Skills

- **Hardware Description Languages**: Verilog, System Verilog
- **Software programming Languages**: Python, C, MATLAB
- **Tools**: ngSpice

Positions of Responsibility

- **General Secretary, IEEE RGIPT SB** *Aug,2024 - till date*
- **11th Class Coordinator, Gyanarpan** A joint initiative of HAL and RGIPT *March 2024 - till date*
- **Designing Head, E-cell, RGIPT** *Aug,2023 - Aug,2024*

Extra-Curricular Activities

- Hosted workshop on "Intellectual Property Rights" sponsored by Council of Science and Technology, UP
- Hosted Departmental Orientation for session 2023-2024 and 2024-2025
- Hosted the inagural session of SERB Sponsored Five Days Karyashala on Artificial Intelligence and Internet of Everything