Pritipriya Dasbehera

Bhubaneswar, India

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Education

National Institute of Science Education and Research   *Bhubaneswar, India*

Integrated Masters in Physical Science   *October 2021 - Present*

- Minor in Computer Sciences
- Current GPA: 9.39
- **Relevant Coursework:**
  Classical Physics-I, Mathematical methods-I&II, Electromagnetism-I&II, Quantum Mechanics-I&II, Special Relativity, Statistical Mechanics, Condensed Matter, Nuclear Physics, Graph Theory and Algorithm Design, Machine Learning
- **Relevant Lab Courses:**
  Basic and Advanced Electronics, Optics, Computational, Nuclear Physics, Solid State

Kendriya Vidyalaya Balasore   *Odisha, India*

Middle and High School   *August 2011 - May 2021*

- CBSE board class 12th - 96.8 %
- CBSE board class 10th - 98 %

Work Experience

Inter-University Acceleration Centre   *New Delhi, India*

Summer internship | Accelerator Physics   *June 2023 - July 2023*

- Under the supervision of Dr. Rajesh Vikram Hariwal
- Investigations on Metamaterials for Beam Diagnostics Application

National Institute of Science Education and Research   *Odisha, India*

Experimental verification of the Einstein-de Haas effect

- A physical phenomenon in which a change in the magnetic moment of a free body causes the body to rotate following conservation of angular momentum
- **Technical Skills:** Advanced electronics
- **Soft Skills:** Teamwork, Logical Thinking.

National Institute of Science Education and Research   *Bhubaneswar, India*

Summer internship | Computational Astronomy   *May 2022 - July 2022*

- Under the supervision of Dr. Nishikanta Khandai
- Study and implement brute force and Nearest Grid Point algorithm to find the Nearest Neighbours under Periodic Boundary Conditions and compare their time complexities.

Intershala course   *Online | Bhubaneswar, India*

Machine Learning Course   *March 2022 - April 2022*

- **Topics covered:** Linear and Logistic Regression, Decision Tree, Ensemble model and Clustering
- Certificate

Projects

Quantum Neural Network   *Bhubaneswar*

NISER   *Aug 2023 - Oct 2023*

- Building a Image classifier algorithm with classic Convolutional Neural Network and a linear quantum layer
- Implementation of forward and backward pass on a quantum layer

Skills

Programming	Python(Pandas, Tensorflow, PyTorch, NumPy, Scipy) Rust, C, C++
Miscellaneous	LaTeX, Linux CLI
Soft Skills	Critical thinking, Adaptability, Teamwork, Openness to criticism

Highlights

2023	**President**, Robotech Club NISER	*India*
2022	**Second position in Inquizitive Physics Quiz**, IGNITE	*India*
2022	**First position in Vigyan Vyakhya(Sci-Video) competition**, IGNITE	*India*
2022	**Cleared Prelims**, National Anveshika Experiment skill(NAEST)	*India*
2021	**Inspire Scholar**, Department of Science and Technology	*India*

Interests

Robotics	Interested in bringing textbook physics and programming to life through robotics as a co-curricular activity
Stargazing	Occasionally find myself strolling alone enjoying the night sky.
Reading	Have always loved reading mostly detective and mystery light novels.
Sci. Comm.	Regularly promote physics as a basic science to school students by showcasing interesting science experiments

Languages

English	Professional proficiency
Odia	Native proficiency
Hindi	Conversational proficiency