# PRITAM ACHARYA

+91 88478 95361 | pritam.acharya@students.iiserpune.ac.in | linkedin.com/pritam | pritam-acharya.github.io

#### **EDUCATION**

Indian Institute of Science Education and Research (IISER)  BS-MS, Mathematics	Pune, Maharashtra Aug. 2020 – Dec. 2025
D.A.V. Public School Intermediate, C.B.S.E. (95.2%) [Marksheet]	Cuttack, Odisha Apr. 2019 – Mar. 2020
D.A.V. Public School  Matriculation, C.B.S.E. (96.6%) [Marksheet]	Cuttack, Odisha Apr. 2017 – Mar. 2018

#### **EXPERIENCE**

### **Project on Multidimensional Random Walks [Report]**

May 2022 – Jul. 2022 Pune, Maharashtra

Guide: Dr. Anup Biswas [Completion Certificate]

- Pune, Maharashti
- Examined "Simple Random Walks", their first visits, first returns, and 'Gambler's Ruin' problem using geometrical and combinatorial techniques.
- Examined multi dimensional random walks. Estimated asymptotically, the number of points a walk passes through using combinatorial and analytical techniques.
- Estimated the rate of escape to infinity of a random walk in more than 3 dimensions. Involved usage of discrete math, involved analysis techniques, and measure theory.

Web Development Oct. 2020 – Present

Websites developed: IISER Pune's iGEM wiki, Portfolio website

Pune, Maharashtra

- Used HTML, CSS, and JavaScript to develop the structure, design, and functionality of the websites.
- Involved usage of node.js, and twitter bootstrap.

Student Mentor

D.A.V. Public School

Sept. 2020 – Feb. 2021

Cuttack, Odisha

D.A.V. Public School
 Mentored a select group of individuals in their senior year for science and math olympiads.

• Responsibilities included conducting mock tests, grading them, and providing students with necessary inputs. Encouraged students to come up with unique and different solutions to the same problem.

## **SKILLS**

**Programming Languages**: Python, and SageMath. **Frameworks**: NumPy, Pandas, Tensorflow and matplotlib.

Miscellaneous: Proficient in LaTeX, git, MATLAB, MS Excel and gnuplot.

**Front-End**: HTML, CSS, and JavaScript.

#### SCHOLASTIC ACHIEVEMENTS

<ul> <li>Among the 30 individuals to be invited to attend the Radio Astronomy Winter School. Could not attend due to scheduling conflict.</li> </ul>	Dec. 2021
• <b>Bronze Medalist</b> in <b>OPhO</b> (Online Physics Olympiad). World rank 10 in the open round, and world rank 17 in the invitational round. [Certificate]	Jul. 2020
• Scored <b>53/119</b> in <b>Indian National Chemistry Olympiad.</b> The median score was 32, qualifying marks for the next stage were 54.5. [Marksheet]	Feb. 2020
• Scored <b>35.5/80</b> in <b>Indian National Physics Olympiad</b> . The median score was 28.5. [Marksheet]	Feb. 2020
<ul> <li>Among the Top 1% (National Level) to qualify National Standard Examination in Chemistry (NSEC). Invited to appear in INChO. [Invitation]</li> </ul>	Jan. 2020
• Among the <b>Top 1% (State Level)</b> to qualify National Standard Examination in Physics ( <b>NSEP</b> ). Invited to appear in INPhO. [Invitation]	Jan. 2020
• <b>Gold Medalist</b> in <b>Technothlon</b> , an exam of logic organized by IIT-Guwahati students, awarded with an <b>All India Rank of 5</b> among 50,000 candidates. [Certificate]	Oct. 2019
• Awarded with the Kishore Vaigyanik Protsahan Yojana Fellowship by Dept. of Science	
and Technology, Government of India. [Certificate]	Feb. 2019

## **KEY COURSES UNDERTAKEN**

**Physics**: Introductory Mechanics, Electrostatics, Introduction to Quantum Mechanics, Thermal and Statistical Physics, Classical Mechanics, Statistical Mechanics 1\*

**Mathematics**: Single Variable Calculus, Multi Variable Calculus, Linear Algebra, Introduction to Probability, Advanced Linear Algebra, Discrete Structures, Real Analysis 1, Group Theory, Graph Theory, Ordinary Differential Equations, Point Set Topology, Rings & Modules, Statistical Inference, Real Analysis 2, Algorithms\*, Natural Language Processing\*, Measure Theory\*, Cryptography\*, Advanced Topics in Graph Theory\*

(\* marked courses to be completed by Apr. 2023)

# CO-SCHOLASTIC ACHIEVEMENTS

•	Co-founder and convener of FinStreet, the finance club of IISER Pune.	2021
•	Semi-finalist in the <b>PCRA Saksham Quiz</b> . Represented the state of Odisha in the South Zonal Finals.	2018
•	Runners-up in <b>Mettle Meet Quiz</b> . Awarded with a cash prize of ₹50,000.	2018