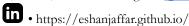
Eshan Mohamed Jaffar

Thrissur, Kerala, India • eshan.ug2023@cmi.ac.in



EDUCATION AND SKILLS

Chennai Mathematical Institute

August 2023 - April 2026

Degree

Major Mathematics
Minor Computer Science

Technical Skills & Interests

Homi Bhabha Centre For Science Education (HBCSE)

- **Programming & Tools:** Proficient in C++, Python, and Excel; experienced in mathematical computing with NumPy and automation via Unix/Linux shell scripting.
- Mathematics: Passionate about applying probability theory across diverse domains. Currently studying probabilistic number theory and exploring applications of the Central Limit Theorem..

Awards & Honors

•	Among top 6 in the state of Kerala selected for appearing for Indian National Mathematics Olympiad	2022
•	Among top 30 in India selected as a INMO Awardee in the Indian National Mathematics Olympiad	2022
Chennai Mathematical Institute (CMI)		
•	Shriram Scholarship: Tuition fee waiver and monthly stipend for undergraduate studies at CMI.	2023
•	Among top 30 high scorer high in the Final round Scholastic Test of Excellence in Mathematical Sciences	2021

PROJECTS

Measure Theoretic Probability

May 2024 - July 2024

- prof. Rajeeva Karandikar
- Studied measure theory (σ-algebras, measurable functions, Carathéodory extension) to formalize probability spaces
- Proved fundamental convergence theorems (Monotone Convergence Theorem, Dominated Convergence Theorem)
- Reviewed the following <u>notes</u>, followed by the first 2 chapters of "Measure, Integration & Real Analysis" by Sheldon Axler and then
 the first chapter of "Probability: theory and examples" by Rick Durrett

Volunteering Activities

Head of Finance, Tessellate College Fest

October 2024 - February 2025

 Led the finance team for the college fest, managing budgets, coordinating financial planning, and ensuring smooth execution of all monetary aspects, thereby honing leadership and organizational skills

Mathematics Tutor, INMO Preparation

December 2023

 Tutored high-performing students who qualified for the Regional Mathematics Olympiad (RMO) as part of INMO training, developing lesson plans and clarifying advanced mathematical concepts to strengthen their problem-solving abilities.

Workshops and Conferences

• Comparative Prime Number Theory Symposium, University of British Columbia

July 2024