# **Soham Chatterjee**

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#### Education

Chennai Mathematical Institute

Chennai, Tamilnadu, India

2021 - Ongoing

University of Calcutta

B. Tech 1st Year - Electronics and Communication Engineering

2020 - 2021

Baranagar Narendranath Vidyamandir

B. Sc - Mathematics and Computer Science

Higher Secondary ( $12^{th}$  Standard)

Kolkata, West Bengal, India 2018 – 2020

Kolkata, West Bengal, India

Baranagar Ramakrishna Mission Ashrama High School

Secondary ( $10^{th}$  Standard)

Kolkata, West Bengal, India

2008 - 2018

#### **Academic Achievements**

CMI Entrance Chennai Mathematical Institute

Entrance exam of Chennai Mathematical Institute 2021

NEST NISER

Entrance exam of National Institute of Science Education and Research (NISER) 2021

WBJEE - Rank 1893 WBJEEB

West Bengal Joint Entrance Exam

12th Statistics Olympiad - Rank 108
AIMSCS

C R Rao Advanced Institute of Mathematics, Statistics and Computer Science (AIMSCS) 2020

#### **Reading Projects**

Ramanujan's work on theta functions and q-series and their connections with number theory.

Under Professor Rupam Barman, IIT Guahati during the summer break in May – Jul, 2022.

o Algebraic Circuits: Learning the inherent structure.

Under Professor Nitin Saxena, IIT Kanpur during the winter break in Dec - Jan, 2022.

#### **Topics I Learned**

- o Math Topics:-
  - Analysis:
    - · Real Analysis
    - · Euclidean Space
    - Metric Space
  - Complex Analysis
- Algebra:
  - · Linear Algebra
  - · Group Theory
  - · Ring Theory
  - · Field Theory

- General Topology
- Algebraic Topology (Introductory)
- Probability Theory
- Integral Calculus
- Differential Equations

- Occupation of the computer Science Topics:-
  - Theoretical Computer Science Topics:
    - · Design and Analysis of Algorithms
    - · Theory of Computation
    - · Complexity Theory Partha Mukhopadhyay
    - · Arithmetic Circuits Nitin Saxena
    - · Computational Algebra and Number Theory Nitin Saxena
  - Other CS Topics:
    - · Discrete Mathematics C Ramya & Partha Mukhopadhyay
    - · Introduction to Functional Programming (Haskell)
    - · Advanced Programming with Python

- · Programming Language Concepts (Java, Concurrent Programming, Lambda Calculus)
- Other Topics:-
  - Classical Mechanics
  - English

## **Computer Skills**

- o Programming Languages: Python (Basic), Haskell (Basic), Java (Basic), Unix/Linux Shell Scripting
- o **Technical Skills:** LATEX, Git, Basic works in terminal, VIM

### **Hobbies**

o Watch Anime, Listen Music (J-pop, Western), Theming linux desktop