Aryaman Maithani   18B090001

Mathematics   UG Third Year (B.S.)

Indian Institute of Technology Bombay   Male

                                                        DOB: 29-09-2000

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	9.72
Intermediate/+2	Central Board of Secondary Education	Nehru Smaraka Vidyalaya	2018	94.00
Matriculation	Council for the Indian School Certificate Examination	Ryan International School	2016	94.67

Pursuing honours in Mathematics.

ACADEMIC ACHIEVEMENTS

- Ranked *1st* in Mathematics Department on the basis of academic performance.   *(May 2020)*

- Awarded the **AP** grade in the following courses:
    - MA 403 (Real Analysis), awarded to 2 out of 70 students.   *(Autumn 2019)*
    - MA 419 (Basic Algebra), awarded to 1 out of 70 students.   *(Autumn 2019)*
    - CS 288 (Logic), awarded to 2 out of 132 students.   *(Autumn 2019)*
    - CS 101 (Computer Programming), awarded to 5 out of 663 students.   *(Autumn 2018)*

- Achieved All-India Rank **595** out of 1,000,000 participants in **JEE (Main) 2018**, an entrance exam for undergraduate level.   *(April 2018)*

- Achieved All-India Rank **742** out of 165,000 participants in **JEE (Advanced) 2018**, an entrance exam for admission to IITs.   *(May 2018)*

- Secured a seat in **Chennai Mathematical Institute (CMI)** on the basis of my performance in its entrance exam.   *(May 2018)*

- A recipient of the KVPY fellowship offered by the Indian Institute of Science (IISc).   *(June 2018)*

- Secured an All-India Rank of **147** out of 50,000 in **Kishore Vaigyanik Protsahan Yojana (KVPY) 2017**, in SX stream.   *(November 2017)*

READING PROJECTS

Primes is in P   *(February 2020)*
Guide: Professor Ronnie Sebastian
Read the paper "Primes is in P" about the AKS Algorithm by Agrawal-Kayal-Saxena and wrote a report on that.

Posets   *(September 2019)*
Guide: Professor Koushik Saha
Read about posets from Enumerative Combinatorics by Richard P. Stanley and gave a presentation on it as part of extra reading in Combinatorics.

Topology - Classification of Surfaces   *(April - July 2019)*
Guide: Summer of Science mentor under Maths and Physics Club, IIT Bombay
Made a report based which was selected to be awarded by a Certificate of Merit by the Club.
The report contains an introduction to topology and a proof of the Classification of Surfaces.

TEACHING

- Entrusted with the responsibility of being a Teaching Assistant for the courses MA 105 - Calculus, MA 106 - Linear Algebra, and MA 108 - Ordinary Differential Equations.   *(Autumn - Spring 2019)*

- Conducted seven TSCs (Tutorial Service Centre) for teaching concepts of MA 105, CS 101, MA 106, and helping in solving doubts, organised by the Student Support Services, IIT Bombay.
  (September 2019 - February 2020)

- Was a speaker for an introductory workshop on Python conducted by the PG Academic Council aimed at the students of the Mathematics Department, IIT Bombay. *(August 2019)*

- Conducted a help session on *proof-writing* for fellow classmates upon request by instructor.
  (October 2018)

- Was a speaker for two help sessions for CS 101 conducted by the PG Academic Council.
  (October - November 2018)

- Completed 80 hours of community service by teaching in NGOs as a volunteer of National Service Scheme, IIT Bombay. *(August 2018- April 2019)*

- Mentored a team of students at the Code Camp organised by CodePrompt, Internet Academy in association with the Web and Coding Club, IIT Bombay. *(August 2018)*

POSITIONS OF RESPONSIBILITY

- **Teaching Assistant**

  Course: MA 105 - Calculus *(August 2019 - December 2019)*
  Instructor: Professor Sudhir Ghorpade, Mathematics Department, IIT Bombay

  Course: MA 106 - Linear Algebra *(January 2020 - February 2020)*
  Instructor: Professor Jugal K. Verma, Mathematics Department, IIT Bombay

  - Responsible for conducting tutorial sessions for a batch of 50 students throughout the course and helping them clear conceptual doubts through personal interaction.
  - Assisted in correction of answer sheets.
  - Created a webpage containing compilation of personal solutions, extra questions, and relevant resources which was used by 1100+ freshmen.

- **Convener** *(April 2019 - March 2020)*
  Maths and Physics Club, Institute Technical Council, IIT Bombay

  - Conducted activities in a team of 7 to foster enthusiasm in mathematics and physics, tending to a community of 400 - 500 in campus with an online presence of over 8000.
  - Worked in conducting of Summer Of Science 2019, a novel initiative through which over 400 students got an opportunity to pursue a reading project in a topic of their interest, under the guidance of over 120 student senior mentors.
  - Conducted the quizzing event Bazinga! Maths which involved hosting as well as creating the question paper for the same.

KEY COURSES TAKEN

MATHEMATICS	Calculus, Linear Algebra, Ordinary Differential Equations, Real Analysis, Complex Analysis, Basic Algebra, Galois Theory, Combinatorics, Basic Number Theory, Multivariable calculus
COMPUTER SCIENCE	Computer Programming and Utilisation, Logic for CS

TECHNICAL SKILLS

LANGUAGES	LaTeX, Java, C++, Python, HTML, CSS, Markdown, Jekyll, Scratch
TeXnical skills	tikz, tikz-cd, beamer presentations