



Maathangi S  
Mathematics  
Indian Institute of Technology Bombay

22B3316  
B.S.  
Gender: Female  
DOB: 04/12/2004

| Examination | University | Institute  | Year | CPI / % |
|-------------|------------|------------|------|---------|
| Graduation  | IIT Bombay | IIT Bombay | 2026 |         |

Pursuing a Minor in Computer Science and Engineering

## Scholastic Achievements

- Ranked **top 1%** to qualify for **Indian National Mathematical Olympiad** from the state (Oct'19)
- Secured **AIR 7 & female topper** of Indian Statistical Institute's (Bangalore) entrance exam (May'22)
- Offered **100% scholarship** by Chennai Mathematical Institute (CMI) along with admission (May'22)
- Achieved **AIR 1662** in **JEE Mains** examination among 9,50,000 candidates across the country (Jun'22)
- Attained **AIR 3895** in **JEE Advanced** examination among the top 1,50,000 candidates (Aug'22)
- 1 of 10000** recipients of **INSPIRE Scholarship** for meritorious performance in JEE Mains ('22)

## Positions of Responsibility

**Institute Student Mentor | Student Mentor Program** (Jul'24 - Present)

- One of **19** third-year students entrusted with the responsibility of mentoring a group of incoming freshers
- Selected from **430+** applicants via a rigorous procedure comprising of SoP, peer reviews, & interviews

**Department Academic Mentor | Mathematics** (Jun'24 - Present)

- 1 of 6** members enhancing exchange-program opportunities, student-faculty interactions for sophomores
- Mentoring **4** sophomores across academic & extra-curricular activities via monthly informational sessions

**National Entrepreneurship Challenge (NEC) Mentor | Entrepreneurship Cell** (Sep'23 - Feb'24)

*Asia's Largest Entrepreneurship promoting student body recognized by NEN | Patronage from UNESCO*

- Managed **15+** colleges to setup entrepreneurship cells, recruit **60+** members & organize **15+** events
- Helped organize a **3-day finale** for **90+** top E-Cells filtering from 350+ colleges & on-site execution
- Charted milestones for E-cell setup, drafted organizational structures & guided with events planning

## Professional & Research Experience

**NoQs Digital | Data Analyst Intern** (May'24 - Jun'24)

*Received **Best Team Player** award & **Recommendation Letter** from CEO for exceptional performance*

- Reduced time taken in certification process by **95%** (2h to 5 mins) by creating an Excel to Email trigger
- Developed scrum management tool** to monitor key activities in the org for CEO using Power BI

**Zeckendorf Game | Polymath Jr. REU | Research Intern** (Jun'24 - Present)

*Guide: Prof. Steven J Miller | Department of Mathematics, Williams College, US*

- Studying Zeckendorf games and its properties focusing on its bounds in length & **winning strategies**
- Formulating an algorithm to solve an **open problem** that aims to **prove** or **disprove** a winning strategy

## Key Projects

**Effects of Interest Rate Hikes on Asset Classes | Finsearch | Finance Club** (Jun'24 - Present)

- Examined the impact of interest rates over 60 years across **5+** asset classes like **stocks, derivatives**
- Analyzing its macroeconomic effects & implementation strategies through expert chats & historic data

**Stock Prediction via Deep Reinforcement Learning(DRL)| Research Project** (May'24 - Present)

*Guide: Prof. Sudeep R. Bapat | Shailesh J. Mehta School of Management, IIT Bombay*

- Reviewed **15+** research papers & identified key inflection points in history of stock prediction algorithms
- Validating hybrid approach of DRL & sentiment analysis to be a superior trading algorithm using Python

**ICICI Bank - Case Study | Course Project | Introduction to Management** (Dec'22)

*Guide: Prof. Ashish Pandey | Shailesh J. Mehta School of Management, IIT Bombay*

- Analyzed various components of its **Business theory** and classified its products using **BCG Matrix**
- Collated a comprehensive report on its general strategies, organizational design, and business setup

## Extracurricular Activities

|                 |   |
|-----------------|---|
| <b>Social</b>   | Addressed & inspired <b>50+</b> underprivileged students at KalpaVriksha institute about JEE  |
| <b>Cultural</b> | Completed formal training in <b>Bharatnatyam</b> and <b>Western dance</b> for 2 years<br>Performed multiple captivating group dances at the Tamil Cultural Association Fest |
| <b>Sports</b>   | Accomplished <b>60+</b> hours of <b>NCC</b> training & a 2-month intensive Table Tennis program   |