Aditya Iyengar
Mechanical Engineering
Indian Institute of Technology Bombay

180100007
UG Third Year (B.Tech.)
Male
DOB: 31 August 2000

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	8.83

Pursuing a **Minor** at the Department of **Computer Science and Engineering**, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 134** in **JEE (Main) 2018** and **All India Rank 511** in **JEE (Advanced) 2018**
- Secured **98.8%** in the **ICSE, March 2016**, ranking **3rd** in the country among 170,000+ students
- Awarded the prestigious **KVPY Scholarship 2016** in the SA stream, achieving an **All India Rank** of **293**
- One of two students from IIT Bombay nominated to attend the **Summer University Programme 2020** at the **Technical University of Denmark**

TECHNICAL PROJECTS

Football Predictions using Machine Learning — Course Project   *March 2020 - June 2020*
Guide: *Prof. Preethi Jyothi*   *IIT Bombay*
- Designed a **neural network based model** to analyse historical football data and predict future results
- Devised a novel **Expected Goals Poisson Distribution** model to accurately estimate the number of goals scored in a football match, thus incorporating a wide range of factors including skill, tactics and past performances
- Achieved an **accuracy of 53%** on the English Premier League 2019-20, outperforming predictions made by the top 5 bookmakers in the UK for the same tournament

Language Model Generation — Self Project   *April 2020 - July 2020*
- Trained an **N-gram model** on over 10 million words to predict the next word, given a sequence of words
- Optimized the model with techniques such as **Kneser-Ney Smoothing** and **Stupid Backoff** and added a minimum edit-distance based **autocorrect** model to correct contextually misused and wrongly spelled words

Research Assistant — THTF Lab IIT Bombay   *November 2019 - present*
Guide: *Prof. Arunkumar Sridharan*   *IIT Bombay*
- Working at the **Thermal Hydraulic Test Facility, IIT Bombay**, to calibrate fluid flow measuring devices as a part of the design of the experimental facility for an AERB project on **Condensation Heat Transfer**

TECHNICAL PROFICIENCIES

- **Programming Languages**: C++, Java, Python, R, MATLAB, Solidity, HTML, CSS, JavaScript
- **Courses**: Machine Learning, NLP*, Quantitative Modelling*, Blockchain*, Optimization, Stochastic Models (* - Online Specializations)

POSITIONS OF RESPONSIBILITY

Teaching Assistant — IIT Bombay
- **Engineering Drawing and Graphics (Spring 2020)** (*Prof. A. Agarwal*): Reviewed problem sets and examinations provided to **600+ freshmen**, solved and graded them, all on a weekly basis
- **Ordinary Differential Equations (Summer 2019)** (*Prof. G.K. Srinivasan*): Mentored and monitored the performance of **20 academically underperforming students** and conducted six hours of tutorial sessions

Department Academic Mentor — IIT Bombay   *June 2020 - present*
- Mentoring **8 sophomores** and helping them strike a balance between academics and extra-curriculars whilst liaising with faculty and over **30 co-mentors** in order to smoothen their transition into the department

EXTRACURRICULAR ACTIVITIES

- **Scrabble at National and International Level**
  - **Represented India** as a part of a **7-member** contingent at the **World Scrabble Championships 2019**
  - **Qualified to represent India** at the **World Youth Scrabble Championships** in 2013, 2014, 2016 and 2017, **finished 5th in the 2016 tournament** and was invited to be the **tournament director in 2019**
- Awarded the **Times Spark Scholarship** in 2018 issued by the Times of India **worth Rs. 100,000**
- Secured **First Position** in 2016 and **Second Position** in 2015 at the **BSE International Financial Olympiad** held at **Bombay Stock Exchange, Mumbai**