MANOJ MANOHAR KARNEKAR   **Roll: PH20D029**

Physics   **Teaching Assistant (TA)**

Indian Institute of Technology Madras   **Male**

DOB: 29/09/1997

Examination	University	Institute	Year	CPI / %
Research Assistant	IIT Madras	IIT Madras	2021	8.50/10
Post-Graduation	IIT Bombay	IIT Bombay	2020	8.06/10
Graduation	Mumbai University	Mithibai College	2018	89.00
Intermediate/+2	Maharashtra State Board	Sanskardham College	2015	78.00
Matriculation	Maharashtra State Board	Green Land High School	2013	74.00

Academic Achievements

- Have received Stipend (HTRA) amount of Rs **31,000/PM** for Teaching & Research at IIT Madras. *(Sept20'- Jan22')*
- **Qualified** three national level examinations, namely Junior Research Fellowship (**JRF**) with **96.75** percentile, Graduate Aptitude Test in Engineering (**GATE**) with **97.93** percentile, and Joint Entrance Screening Test (**JEST**) with **94.33** percentile. *(20')*
- Secured **98.69 percentile** in IIT JAM. *(18')*
- Consistently, among the **top 3 scorers** of the class during undergrad with a GPA of 6.98 out of 7. *(15'-18')*
- Placed among the **top 1%** of state and **top 10%** of centre in NGPE for 2017 and 2018 respectively.
- Cleared **JEE Mains** and qualified for JEE Advanced. *(15')*

Work Experience

- **Teaching Assistant:** Took **Tutorial sessions** for BTech students at IIT Madras, explaining each problem, solved their doubts, and **corrected** their **exam papers**. *(Sep 20' – Jan 22')*
- **Research Assistant**: Had **Weekly Discussions** with guides and colleagues to understand and solve problems related to Tensor Networks. Participated in **the group's Journal Club** and gave presentations of my works. *(Sep 20'-Jan 22')*

Technical Skills

- *Operating System:* **Windows 10, Ubuntu 18.06.**
- *Programming Language:* **Python, FORTRAN, C++, Wolfram Mathematica 12**.
- *Plotting and Presentation:* **Microsoft Excel, Powerpoint, Origin.**
- *Writing software:* **LaTeX, Microsoft Word.**

Internship

- ❖ *Experience with two Ed-Tech Start-up:*
  - Worked towards building start-ups such as TechLary and Upsilon incubated at IIT Madras. Was Responsible for collecting all **content** for BTech and other students, uploading it on the website, inviting people to access the platform meant for learning skills and excelling in academics, and coming up with innovative ideas to improve start-up. *(Jun 21' – Nov 21')*

Certifications

- Earned **Machine Learning and Analytics Certification** by learning Statistical Techniques, Excel, SQL Techniques, and applying them to business problems.   *(Jul 21')*

Academic Projects

- *Master's Project*:
  Studied patterns and general formulas in polynomials using **Mathematica 12** and used them to find the higher-order polynomials. Got a 9/10 grade on this project.   *(19'- 20')*

- *Electronics Course Project:* (**IIT Bombay**): **Made** an electronic **circuit** that can measure the concentration of chemical solutions. Gained knowledge of various electronics components and experience **working in teams**.
  (18')

Interpersonal skills

- Completed "Finding the Leader in You" Program focused on learning and practicing **non-cognitive skills,** conducted by CMI, New Jersey.   *(Jul 20')*
- Astronomy **group workshops** at IIT Bombay: Stargazing, DS9 Workshop, Finding the neutron star using Machine Learning.   *(18')*
- Participated in many **Debate Competitions** held by Speakwell English Speaking Academy and won one 1st prize by our team.   *(16')*