



Masada Jaswanthi
Computer Science & Engineering
Indian Institute of Technology Bombay

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B.Tech.
Gender: Female
DOB: 28/06/2004

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2025	

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank 1187** in **Joint Entrance Examination (Advanced)** among **1,50,000** aspirants(2021)
- Achieved **99.794** percentile in **Joint Entrance Examination (Main) B.Tech** among 10 lakh candidates (2021)
- Secured **State Rank 314** in **AP EAPCET** among **170 thousand** candidates conducted by the **APSCHE**(2021)
- Chartered as a **KVPY fellow 2019 SA stream** with **All India Rank 263** among 50 thousand students (2019)

PROJECTS

Portal for the courses | *Course Project* | *Prof. Kavi Arya* (Nov '22)

- Developed online Learning Management System (**LMS**) with **Role-Based** Access Control using Django's framework
- Implemented user-friendly **DashBoard** enabling access to academic progress and enhancing productivity through **Automated evaluation** and **To-Do list** features using **HTML, CSS** for frontend and **PostgreSQL** as database

Railway Station Planner | *Course Project* | *Prof. Supratik Chakraborty* (Sep-Oct '22)

- Developed an interactive Railway Planner in C++ using diverse Data Structures **Trees, Graphs, Priority queues, Heaps, Dictionaries, Tries** and Algorithms like **QuickSort, Dijkstra** ensuring efficient journey data planning
- Implemented **KMP** algorithm with Tries for streamline user review processing, enhance station search-completion

Image Processing and Data Analysis | *Course Project* | *Prof. Suyush P. Awate* (Oct '22)

- Implemented **PCA** for the **Hyperplane Fitting** and implemented **Linear Regression** on the scatter-plots
- Dimensionality Reduction**, visualized 28x28 pixel image on 84D Hyperplane and maximized **Dispersion**
- Implemented **Reverse Image Processing** to get Original image and **Character recognition** with PCA

Cache Hierarchy Optimization | *Course Project* | *Prof. Biswanandan Panda* (Apr '23)

- Explored limitations of conventional methods in addressing cache latency challenges in **Graph workloads**
- Compared performance analysis of simulator on various cache hierarchy policies such as **Inclusive, Exclusive, Non-Inclusive** along with a range of **replacement policies** and **prefetchers** for the Last Level Cache

Bubble Trouble | *Course Project* | *Prof. Parag Chaudhuri* (Feb '21)

- Utilized **Simplecpp Graphics** libraries in C++ to create a visually engaging game interface for players
- Utilized **Vectors** and **Classes** in **OOPs** to maintain state of the bubbles, shooter and Incorporated **level, health, score** and **time** cards to enhance the experience and provide players with relevant information during game

Socket Programming | *Course Project* | *Prof. Bhaskaran Raman* (Apr '23)

- Developed a versatile **server-client** system with support for multiple connections, enabling seamless file transfers
- Implemented **rate limiting** to control data reception, enabled **bidirectional file transfer** between server-client

POSITION OF RESPONSIBILITY

Junior Design Engineer, Software Subsystem | *Team Rakshak, IIT Bombay* (Jan '23 - Present)

Team Rakshak is a multidisciplinary tech team of 40+ members that develops robust UAVs for SRO

- Completed specialization in **Machine Learning** offered by **Coursera**, enhancing knowledge and practical skills
- Actively participating in **Kaggle competitions** demonstrating strong ability to work with real-world datasets
- Implementing **SOTA models** like **YOLO, DINO** to localize objects in real-time videos and learn **powerful image representations** without the need for manual annotations, improving downstream transfer learning tasks

TECHNICAL SKILLS

Programming	C, C++, Python, Java, VHDL, Assembly, Prolog, Bash, Sed, AWK
Development	HTML, JavaScript, CSS, Bootstrap, Django, PostgreSQL
Software	Git, L ^A T _E X, MATLAB, NumPy, TensorFlow, FLTK, matplotlib, Docker, Wireshark, NS3

EXTRACURRICULAR ACTIVITIES

- Completed a year long military training under the **National Cadet Corps (NCC)**, IIT Bombay (2021-2022)
- Achieved **state 1st and 2nd ranks** in the years 2014, 2015 respectively in the exam **AIMED** (2014-2015)
- Volunteered for the **marathon** with **5000+** participants organized by Fitizen in collaboration with Aavhan (2023)
- Participated in **Codewars v1** competition, with a team of 4 organised by **WnCC club**, IIT Bombay (2021)