

Pursuing Minor in **Machine Intelligence and Data Science** at CMinDS, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Secured **All India Rank xx** in Joint Entrance Examination Advanced amongst the **2,50,000** candidates (2021)

OLYMPIADS AND SCHOLARSHIPS

- Achieved **International Rank 1** in the International Mathematics Olympiad (IMO) conducted by SOF (2018-19)

KEY PROJECTS

Image Generation Using PCA

October 2022

Guide: Prof. Suyash P. Awate | Course Project: Data Analysis and Interpretation

IIT Bombay

- Performed **dimensionality reduction, hyperplane** fitting on fruit images and MNIST dataset using **PCA** in **R**
- Implemented a **generative model**, hence sampling some unseen data from the above implementation of hyperplane

OTHER PROJECTS

Random Walkers

September 2022

Guide: Prof. Suyash P. Awate | Course Project: Data Analysis and Interpretation

IIT Bombay

- Simulated N random walkers in **Python**, and obtained the **Gaussian Distribution** plot of their final locations
- Verified the **Law of Large Numbers** by comparing the true and empirically computed mean and variance of the positions

TECHNICAL SKILLS

Programming Languages	Proficient in: C++, Python, Bash, Awk, Sed, Markdown, HTML, CSS, Javascript Familiar with: Java, R, x86_64 Assembly, Prolog, FLTK
Softwares Used	L ^A T _E X, git, neovim, GDB, Sphinx, Doxygen, Jupyter, Docker, Wireshark
Computer Vision	Numpy, Matplotlib, Pandas, Torch, torchvision, sklearn

POSITION OF RESPONSIBILITY

Convener | Club, IIT Bombay

June 2022 - Present

- Part of a **n-member core team** to do club work

RELEVANT COURSES

Computer Science	Data Structures and Algorithms*, Design and Analysis of Algorithms**, Logic for Computer Science**, Discrete Structures*, Computer Networks**, Data Analysis and Interpretation*, Software Systems Lab*, Digital Logic Design and Computer Architecture**, Computer Programming and Utilization, Abstractions and Paradigms for Programming
Mathematics	Calculus, Differential Equations, Linear Algebra
Others	Quantum Physics and Application, Basics of Electricity and Magnetism, Introduction to Electrical and Electronics Circuits*, Optimization Models*, Economics**

*: To be completed by November 2022

**: To be completed by April 2023

EXTRACURRICULAR

- Made a **Remote Controlled car** with a browser website used on a mobile phone as a remote under **XLR-8**, an annual event conducted by Electronics and Robotics Club, IIT Bombay, and completed the track (2022)