



Jaideep Singh Chawla
Metallurgical Engineering and Materials Science
Indian Institute of Technology Bombay

190110030
B.Tech.
Gender: Male
DOB: 9/29/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2023	

Currently pursuing **Minor** in the Department of **Computer Science and Engineering**

SCHOLASTIC ACHIEVEMENTS

- Currently **ranked 1st** among third-year B.tech undergraduate students in MEMS department (2021)
- Received the **Academic Proficiency (AP)** grade for exceptional academic performance in the following courses: Physical Chemistry (CH107) and Structure of Materials (MM201) (2020)
- Nominated for the prestigious O.P. Jindal Engineering and Management Scholarship (**OPJEMS**) (2020)

PROJECTS UNDERTAKEN

BriefKing | *Seasons of Code, Web and Coding Club, IIT Bombay* (Apr-Jul '21)

A web app which aims to summarize audio files so that it can be used to summarize lecture videos

- Researched** about various **open-source resources** (libraries, APIs and pre-trained models) for extracting text from speech, implemented them and compared their relative performance and word-error rate
- Handled audio-processing by integrating the **denoiser** to the project code that enhances the input audio
- Assisted in building a **clickable prototype** using **Streamlit** (that allows to build UIs directly in Python)
- Cleaned** and **documented** the code followed by deploying the prototype application to Github

Transient Conduction Modelling | *Course Project, Guide: Prof. Nurni N. Viswanathan* (May '21)

- Worked in a team of 3 to **model** a transient heat conduction problem and **visualise the time-evolution** of surface temperature of the system by approximating it as a one-dimensional problem.
- Implemented **finite-difference schemes** in **Python** to solve the relevant partial differential equations, compared the speed and accuracy of explicit and implicit schemes and plotted the results using Matplotlib

Clothes Folding Machine | *Course Project, Guide: Prof. Shantanu Tripathi* (Mar-Apr '21)

- Collaborated in a team of 4 to design a semi-automatic clothes folding machine, using **cam-follower** mechanism which was a **cost-effective alternative** compared to industrial folding machines
- Designed the final working model on **SolidWorks** and mechanism was verified using **MSC ADAMS**

Personal Website | *Front-End Web Development Bootcamp, TSS, IITB* (Jul '20)

- Built a responsive **personal landing page** from scratch with a working navbar and contact form
- Designed the front-end of the website using **HTML, CSS and Bootstrap** and hosted it on **Github pages**

TECHNICAL SKILLS

Languages Python, C++, Java, HTML, \LaTeX **Basic Proficiency** in R, MATLAB, MySQL
Frameworks & Libraries Scikit-Learn, Streamlit, NumPy, Matplotlib, Pandas, Seaborn, CSS, Bootstrap
Softwares Git, PyCharm, RStudio, AutoCAD, SolidWorks, Microsoft Office

- Completed a certified course in **Machine Learning using Python** offered by Verzeo EduTech

POSITION OF RESPONSIBILITY

Teaching Assistant - CH107 | *IIT Bombay* (Jan-Mar '20)

- Catered to course-related queries of 50+ undergraduate students and handled their conceptual doubts
- Communicated students' feedback to instructors on a weekly basis to ensure smooth operation of the course

EXTRACURRICULAR ACTIVITIES

- Tutored online at Baudhayan Career Institute, teaching chemistry to 14 JEE Aspirants (Jul-Dec '20)
- Received **Special Mention** for exemplary **volunteering** work with NSS, IIT Bombay under Sustainable Social Development department for actively contributing to their activities (Nov '20)
- Awarded Certificates of Merit for completion of Front-end Web-development bootcamp, Sci-Comp and Mathematical Modelling bootcamp, and \LaTeX bootcamp under TSS, IITB (Jun-Aug '20)
- Participated in street play titled "Bheja-Fry" centred around mental health issues of students conducted by NSS, IITB held during the institute's Republic Day celebration (Jan '20)