



Sharvari Milind Kumbhar
Chemical Engineering
Indian Institute of Technology Bombay

200020123
B.Tech.
Gender: Female
DOB: 11/9/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2024	

Pursuing a **minor** degree in the department of **Computer Science and Engineering** at IIT Bombay

SCHOLASTIC ACHIEVEMENTS

POSITIONS OF RESPONSIBILITY

Editorial Board Member | *Insight, Official Student Media Body, IIT Bombay* (Apr'22 - Present)

Part of a **18** membered team of editors responsible for covering long-standing issues of importance to institute populace

- Interviewed **10+** people including students and admins involved in campus reboot process during Covid-19 Pandemic
- Creating content reaching **10k+** students, **650+** faculty members with online readership of **0.4M+** in a team of 38
- Publishing content under **Hostel Affairs Vertical** in a team of 3; attained reach of **3k+** on hostel issues posts
- Researching on preparatory course policy in IITs; interviewing **30+** faculties and student representatives across IITs
- Worked collaboratively to increase overall engagement by **186%** and boost interactions by **343%** on **70+** posts

Institute Cultural Convener | *Vaani, Indian Languages Club, IIT Bombay* (May'21 - Apr'22)

Worked in a team of **6** members responsible for management of club with an annual budget of **INR 0.25 million+**

- Conceptualised and executed **40+** events and workshops throughout the year to cater total **15k+** students and faculties
- Spearheaded a team of **10+** organisers in the flagship festival **Izhaar** with **150+** contestants and **1200+** attendees
- Invited and managed **15+** national/international artists throughout the year with **200%** y-o-y increase in outreach
- Handled official blog with **50%** y-o-y increase in readership on writings from students of diverse linguistic backgrounds
- Successfully organised of **first-ever Covid-19** Fundraiser course for story writing and raised funds worth **INR 15k+**
- Boosted social media presence of club by **30%** in 3-months by creating content for the series 'Language of the Month'

INTERNSHIPS & KEY PROJECTS

Biochemical Technology Intern | *Chr Hansen (India) Pvt. Ltd.* (May'22 - Jun'22)

Internship aiming to optimize production process of commercially important molecule using computational techniques

- Received **Letter of Recommendation** from the Head of Pune Tech Centre for sincerity and excellent work ethic
- Performed shake flask study, specific growth curve analysis and **Watson Marlow** pump calibration with **98%** precision
- Developed **python** programs for **optimization** of parameters in differential equations that govern production process
- Built a **kinetic model** trained on a dataset of **2000+** size and obtained curve fitting precision upto **90%** for 5 variables
- Improved current large scale production process of the molecule by suggesting optimal **feed rate** and parameter values

Minimising Car Cabin Temperature | *Guide: Prof. P.Sunthar* | *Course Project* (Jan'22 - Apr'22)

Ideated project statement with an 8 membered team aiming to solve an impactful real life transfer problem

- Performed an extensive literature survey to gain insights into pre-existing solutions and possible improvement
- Obtained differential equation that modelled experimental temperature variation inside car cabin with **92%** accuracy
- Suggested solutions and explored the use of Phase Change Materials to reduce the temperature inside car by **10%**

Capillary Force and its Applications | *Guide: Prof. Guruswamy K.* | *Course Project* (Sep'21 - Oct'21)

Presented a **critical analysis** of research paper 'Capillary force & its application to AFM' through a detailed report

- Pointed out the shortcomings of the approach used in paper and came up with improvements by suggesting remedies
- Reviewed the experimental findings of capillary forces and **quantitative interpretation** of pull-off forces in paper

Language Detection - NLP | *Seasons Of Code* | *Web and Coding Club* (Mar'21 - Jul'21)

Developed Machine Learning model to detect language of extracted text achieving **96%** training accuracy

- Implemented **Logistic Regression** and **Naive Bayes** classifier for text recognition on dataset with **2400+** sentences
- Extracted different languages from images using **EasyOCR python** library followed by further **preprocessing**

ACCOLADES & EXTRACURRICULARS

NCC & Sports	<ul style="list-style-type: none">• Successfully completed a year-long training of NCC DRILL and yoga under National Cadet Corps(21')• Procured 2nd position in District Level Fencing Competition held by State Government(16')• Participated in State Level Fencing Competitions held by Government of Maharashtra(15')
Cultural	<ul style="list-style-type: none">• Bagged Gold medal in Creative Speaking organised by Great Minds Competancy Council, Chennai ('17)• Secured 3rd position in inter school debate competition held by CBSE Sahodaya School Complex ('17)
Social	<ul style="list-style-type: none">• Mentored students from villages for JEE preparation under NGO Vidyoday Mukhtangan Parivaar ('21)• Ran a 15 km marathon for Youth against Drug Addiction campaign at Ichalkaranji, Kolhapur('20)• Volunteered at Vishaalgad plastic collection drive; collected 20+ bags of plastic with 15+ people ('20)
Technical	<ul style="list-style-type: none">• Worked in a team of 4 to design and build RC training aircraft that can do acrobatics & gliding('21)• Skills: Python, MATLAB, Microsoft Office, L^AT_EX, Photoshop, Biolector, 3D Printer, HPLC, Laser cutting