

Unnatee Pawar Chemical Engineering Indian Institute of Technology, Bombay **Contact Number: 9307540383** Email id: udpawar19nsk@gmail.com

190020082 B.Tech. **Gender: Female** DOB: 21-07-2001

Pursuing a Minor Degree in Design offered by Industrial Design Centre, IIT Bombay

Professional Experience

Product Researcher | Zebrathoughts Designs

[May'21-Jul'21]

Received a letter of recommendation for devising product strategy via quantitative, qualitative study of liquor products

- Identified 4 customer segments, market trends in the liquor industry by studying 10+ liquor delivering applications • Conducted analysis of territorial sales opportunities; formulated efficient solution for streamlining liquor supply
- Surveyed product life cycle; studied consumer adoption to compose physical and psychological features of product

Research Intern | Covid 20

[Dec'20-Feb'21]

Guide: Dr. Mathai Fenn, Student Alumni Relation Cell, IIT Bombay

- Scrutinized the socio-cultural and economic impact of Covid 19 across 12 social sectors via primary research
- Consolidated on a journal that outlines the crisis of Covid 19 and mapped out a possible course for future prospects
- Pioneered a dynamic website that provided the users with detailed & timely updates on Covid 19 across the globe

Positions of Responsibility

Design Nominee | Undergraduate Academic Council, IIT Bombay

[Apr'21-Present]

Spearheading a team of 2, accountable for the ideation, publicity and design activities in council of 50+ members

- Conceptualized 4 registration portals for programs catering to research projects, certified courses and reviews
- Increased reach to 8.5k+ students by ideating publicity strategies of 10+ events to promote academic opportunities
- Developed design aspects of 4 Internship Preparation Booklets; collaborated with 6 bodies; catering 3k+ students

Department Academic Mentor | Student Mentorship Program

Selected in a team of 32 mentors out of 80 applications to build a support system for 160+ students

- Guiding 4 sophomores using thorough semester planning to help them overcome academic, non-academic challenges
- Co-authored articles and extensive course reviews for the **DAMP blog** of Chemical Engineering Dept., IITB

Institute Design Convener | Institute Cultural Council

Worked in a team of 8 members to lead the publicity of 80+ events of 13 clubs of the cultural council

- Trained 500+ students in 20+ workshops across 12 design concepts (UI/UX, poster) to foster design culture
- Organized Vision: annual design exhibition with 300+ students; led a team of 50+ to create typography posters

KEY PROJECTS UNDERTAKEN

Evolution of Epigenetic States

[May'21-Present]

Guide: Prof. Ranjith Padinhateeri, Dept. of Biosciences and Bioenginering

- Aiming to analyze the correlation between epigenetic marks & chromatin states from epigenetic experimental data
- Examined the HI-C data to know different aspects of the 3D organization of the chromatin using Juicebox
- Interpreting the influence of epigenetic marks on folding and 3D arrangements by comparing ChIP Seq and HiC data

Flow Analysis in Bent Elbow | Course Project

[Jan'21-Apr'21]

Guide: Prof. Devang Khakhar, Dept. of Chemical Engineering

- Modelled turbulent flow patterns through a right angled bent elbow employing k-e model in OpenFOAM
- Predicted friction factors, frictional energy loss & optimized pipe diameter to reduce frictional energy losses by 25%
- Established a numerical relationship between the diameter and curvature of a bent pipe and the inlet velocity

Elderly Help Project | Course Project

[Aug'21-Nov'21]

Guide: Prof. B.K. Chakravarthy, Industrial Design Centre (IDC)

- Led a team of three to pinpoint 5 unmet needs of elderly people with dementia via primary research & deliberation
- Assessed 5 exhaustive solutions by leveraging empathetic innovation principles post consultation with end users
- Developed a 3D mock-up model by implementing design thinking and performed user testing to full proof model

TECHNICAL SKILLS

Python, MATLAB, LATEX • Programming:

• Software: Adobe Creative Suit [Photoshop, Illustrator, Premier Pro], Figma, AutoCAD, Solidworks

Extracurricular Activities

- Worked with a Ph.D. scholar and led a team of 14; created animations for astronomical phenomena
- Completed 80 hours of social work at National Service Scheme (NSS), IIT Bombay

['20] ['19] ['19]

- Taught at BMC schools, helped in the Animal welfare vaccination and cloth collection campaign
- Volunteered to be a part of the organizing committee of Inter-Varsity Debate Tournament 2019

['19]