



Dhruv Rambhia
Computer Science & Engineering
Indian Institute of Technology Bombay

200050115
B.Tech.
Gender: Male
DOB: 25/03/2003

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

ACCOLADES & ACHIEVEMENTS

All India Rank 43 in JEE Advanced and 158 in JEE Mains 2020	Among the 46 students clearing the INChO selected for OCSC
State Topper in the HSC Science Board among 1.5M applicants	Among 3 students out of 308 awarded an AP grade in Sociology
Qualified the Regional Maths Olympiad from Mumbai region	Third Runner-Up in the Mimamsa Quiz 2021 by IISER Pune

PROFESSIONAL EXPERIENCE

Goldman Sachs Summer Analyst (May '23 - Jul '23)	<i>Worked as a Quantitative Analyst in the Cash and Collaterals Strats Team in the Corporate Treasury Division</i> <ul style="list-style-type: none">Designed a mathematical model to manage liquid assets for the firm during FX market stress scenariosIntegrated the model into a pipeline as a Python module suggesting trades & reporting Liquidity BreachesDocumented and published a detailed Model Document to present the technical nuances of the model
FinIQ Consulting Structured Products Platform Analyst (Dec '22)	<i>Received an in-semester internship offer to continue working on more projects for the firm by the supervisor</i> <ul style="list-style-type: none">Analyzed term sheets of exotic options and structured products to understand their contracts and risksDeveloped an interpolation algorithm for the interest rates as a component of the pricing model backendCollaborated with a team to develop an application pricing FX Option Strips using the Black-Scholes model
TU Braunschweig Research Intern (May '22 - Jul '22)	<i>Received a Letter of Recommendation from Dr Thomas Kürner (Fellow, IEEE) for the outstanding results</i> <ul style="list-style-type: none">Studied the Simulator for Mobile Networks (SiMoNe) to emulate realistic urban mobile network mapsExamined the LAN traffic produced by ECG Vests and used statistical modelling to fit it into SiMoNe
ISB Mohali Online Internship (May '22 - Jul '22)	<i>Received a Letter of Recommendation from Prof. Dr Francis B. Kim for delivering impressive insights</i> <ul style="list-style-type: none">Assessed the dynamics and evolution of the sharing economy while exploring parts of contract theoryScrutinized Uber's Liminal Movement & methods to overcome regulatory challenges in different markets

POSITIONS OF RESPONSIBILITY

Head CSE D-AMP (Mar '23 - present)	<i>Chosen as one of the two Department Academic Mentorship Program (D-AMP) Co-ordinators for CSE dept.</i> <ul style="list-style-type: none">Hand-picked and led a team of 35 mentors from 70+ applicants through an extensive interview processOrganized and presented in versatile seminars, such as Sophomore 101 impacting 200+ junior studentsDelegated as a senior department-level student rep while managing important events and decisions
Student Mentor SMP (Apr '22 - present)	<i>Selected as ISMP and D-AMP mentor to counsel junior students on facing academic and personal issues</i> <ul style="list-style-type: none">Chosen as one of 143 ISMP mentors to guide first-year students after a rigorous selection procedureChosen as a DAMP mentor to help 6 juniors navigate the challenges of their sophomore year in CSE

KEY PROJECTS & COURSES

P2P Crypto Network (Aug '23 - Nov '23)	<ul style="list-style-type: none">Studied the effect of selfish & stubborn mining attacks on the blockchain by simulating a P2P NetworkExamined smart contracts and implemented a decentralized app in Solidity to transfer funds to peers						
R&D Projects	<table><tr><td>SURP '21</td><td>Developed a Python app to demonstrate the NMR concepts for educational applications</td></tr><tr><td>SURP '23</td><td>Carried out literature review and ideation for applications of an optimization method</td></tr></table>	SURP '21	Developed a Python app to demonstrate the NMR concepts for educational applications	SURP '23	Carried out literature review and ideation for applications of an optimization method		
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Summer of Science (May '22 - Jul '22)	<ul style="list-style-type: none">Explored concepts of probability & stochastic processes such as Markov Chains, Gaussian Process etcIdentified potential applications in Quantitative Finance and prepared a detailed report for the project						
Relevant Courses *(ongoing)	<table><tr><td>Mathematical</td><td>Calculus, Ordinary Differential Equations, Mathematical Optimization, Numerical Analysis</td></tr><tr><td>Computer Science</td><td>Databases, Software Systems, Data Structures and Algorithms, Discrete Structures, Logic, Computer Networks, Reinforcement Learning*, Formal Methods in Machine Learning*,</td></tr><tr><td>Finance</td><td>Analysis of Corporate Governance*, Financial Markets, Modelling and Valuing a Company*</td></tr></table>	Mathematical	Calculus, Ordinary Differential Equations, Mathematical Optimization, Numerical Analysis	Computer Science	Databases, Software Systems, Data Structures and Algorithms, Discrete Structures, Logic, Computer Networks, Reinforcement Learning*, Formal Methods in Machine Learning*,	Finance	Analysis of Corporate Governance*, Financial Markets, Modelling and Valuing a Company*
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Finance	Analysis of Corporate Governance*, Financial Markets, Modelling and Valuing a Company*						

EXTRA-CURRICULAR ACTIVITIES

Teaching Assistant	<i>Designated as a TA for a diverse set of courses tasked with responsibilities such as managing course logistics, taking tutorials, setting assignments, grading examination papers and solving doubts including</i>			
	PH107	Intro to Quantum Mech (Dec '21 - Mar '22)	CS293	DS and Algorithms Lab (Jan '22 - Apr '22)
	CS419M	Introduction to AI/ML (Jul '22 - Dec '22)	CS224M	Computer Networks (ongoing)
Hobbies and Interest Pursuits	Sports	<ul style="list-style-type: none">Concluded a course on Rifle Shooting from Anjali Bhagwat Shooting Academy (Dec '22)Completed a 5.5K run in under 35 mins for the Crossy General Championship (Mar '23)Secured runner-up position twice in the Department Football Tournament (Jan '23)		
	Misc.	<ul style="list-style-type: none">Won an essay competition on 'India's Freedom Struggle' held by the PRO, IITB (Aug '21)Achieved 3rd place in 'Strategy Wars' mock trading competition by the UGAC (Jan '23)		