

Kalpesh Khare Aerospace Engineering **Indian Institute of Technology Bombay**

22B0069 B.Tech.

Gender: Male DOB: 26/02/2003

Examination	University	Institute	Year CPI / %
Graduation	IIT Bombay	IIT Bombay	2026

Pursuing a Minor Degree from Computer Science and Engineering department, IIT Bombay

SCHOLASTIC ACHIEVEMENTS

- Secured a percentile ranking of 97.04 in the JEE Advanced amongst 0.15+ million candidates (2022)
- Secured a percentile ranking of 99.16 in the JEE Mains exam amongst 1.03+ million candidates (2022)
- Received an AA grade with a perfect 100% lab exam score in Computer Programming & Utilization (2022)

KEY PROJECTS

Yearbook Portal | Institute Sports Council

(Jun'24 - present)

Institute Sports Technical Head | IIT Bombay

- Developed the Yearbook Portal using ReactJS, ExpressJS, & MongoDB to collect responses, photos, & videos
- Achieved a whopping 200+ unique sign-ups within 3 days of launch from IIT Bombay students & alumni community
- Deployed the portal using Amazon Web Services, utilising S3 for storage and static website hosting, Route 53 for efficient routing, CloudFront for content delivery, SSL certificates for secured hosting with custom domain

Inter IIT Sports App | 56th Inter IIT Sports Meet

(Aug'23 - Dec'23)

Inter IIT Sports Council | IIT Bombay

- Achieved 2500+ downloads for Inter IIT SportsApp using Flutter & Dart, working in a team of 8 members
- Implemented real-time score updates and integrated YouTube streaming for live matches, achieving 100k+ views
- Maintained the app by updating live scores, schedules, and resolving issues, ensuring a seamless live viewing experience

Gesture Controlled Virtual Mouse | Seasons of Code

Web and Coding Club | IIT Bombay

- Developed using MediaPipe and OpenCV for mouse control, volume adjustment, and brightness management
- Implemented 30+ Hand gestures in Python for Scrolling, Clicking, and Volume Control at High Frame Rates
- Designed Multi-Hand detection and UI interactions with PyAutoGUI, enhancing user experience and performance

Analysis on the Indian Census of 2011 | Course Project

Guide: Prof. Prabhu Ramachandran | AE 248 AI and Data Science

- Analysed in a team of 6 the 2011 Indian Census dataset using Pandas, Matplotlib, NumPy, Seaborn, & Scipy
- Conducted data analysis, hypothesis testing, and correlation analysis to derive insights from the census data
- Achieved a prediction accuracy of 99.01% in Regression models to estimate the 2021 census Indian population

De-eX | Web3 Decentralized Exchange | Self Project

(Apr'24 - Jul'24)

A Web3 Decentralized Exchange platform enabling ERC20 token swaps across multiple EVM chains

- Developed a React-based De-eX with Moralis & 1inch API for seamless crypto swaps and real-time price fetching
- Integrated MetaMask and Wagmi for secure, user-friendly, efficient, & reliable Ethereum blockchain interactions
- Built an Express server with Moralis API to provide accurate token price data, enhancing the token swap process

Positions of Responsibility

Institute Sports Technical Head | Institute Sports Council

(Apr'24 - Present)

- Selected in a 22-member student council, leading 3 web conveners and managing tech support for 13k+ student community Responsible for technical aid to 20+ sports activities, which involved deploying web portals and mobile application
- Ideating & deploying IIT Bombay Sports Website & mobile SportsApp which caters 13k+ student community
- Led a team of 3 web conveners to launch the Sports Yearbook Portal for graduating alumni across 14+ sports

Technical Skills

Programming	C++, Python, HTML, CSS, Typescript, JavaScript, Dart, SQL
Softwares and Tools	Amazon Web Services (AWS), MangoDB, MATLAB, LATEX, Git, GitHub
Frameworks	ReactJS, Angular, NodeJS, ExpressJS, Flutter, NumPy, Scipy, Pandas

Courses Undertaken .

Computer Science	Computer Programming & Utilisation, Logics in Computer Science, Discrete Structures, AI & DS, Principles of Data & System Security
Mathematics	Differential Equations, Linear Algebra, Calculus-I, Calculus-II

Extracurricular Activities

- Completed over 50+ hours of rigorous N.C.C. training, involving firearm and rifle shooting
- Completed MS-CIT Maharashtra State Certificate in Information Technology with 99/100
 - (2019)(2018)

(2023)

Passed Elementary and Intermediate Drawing Grade Examinations by DoA, Maharashtra