Ashutosh

Chemical Engineering

Indian Institute of Technology Bombay

210020025

B.Tech.

Gender: Male

DOB: 14/12/2001

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2025	8.02

Scholastic Achievements

- Awarded **AP grade in CS 101** course bestow to **3 students** out of **668** students ['21]
- Secured **99.62** Percentile in **JEE mains** and top **0.40** Percentile in **JEE Advanced** examinations ['21]
- Secured **94.8%** in class 12th and **93.6%** in class 10th CBSE board examination ['20 '18]
- Appeared for **SSB interview** conducted by **Service Selection Board, Ministry of Defence** ['20]

Key Projects

Encryption & Decryption [June 2022]

Guide: Prof. S Akshay, Karan Agarwalla | Course Project | CS101

- Worked independently on project to find the **key** used for encryption of the given text document.
- Several .txt file given as test cases Encrypted using monoalphabetic substitution with unique key of each file.
- Used C++ programming language **OOPs, STL** and **File handling** as key concept.
- Implemented **ETAI strategy, dictionary closure** and **secret word enumeration** for decryption.

InstiCloud | Seasons of Code, IIT Bombay [Apr 2022 - June 2022]

Mentors: Ishit Garg, Karrthik Arya | IIT Bombay

- Project aimed to create **P2P data storage platform** with **blockchain based access control** for data.
- Created a **node.js** app to break data into chunks encrypt each chunk using **RSA encryption method** uses **Public key** to encrypt data and share **Private key** with the users to decrypt data.

Wifi Controlled Racing Bot | XLR8 [Sept 2022]

Electronics and Robotics club, IIT Bombay

- Ranked under **Top 10 teams** among all those engaged in the contest to complete the task in minimum time.
- Controlled the bot through **Wifi** remote control using **ESP32 Micro-controller** and **L293D motordriver**.
- Used differential mechanism and modified Mechanical structure to execute smooth turns and faster speed.

Technical Skills

- **Programming :** C, C++, Python, MATLAB
- **Tools :** Git, GitHub, JavaScript, MySQL, HTML, CSS
- **Kali Linux Tools :** BurpSuite, WireShark, Aircrack-ng, John, HashCat, Social Engineering Toolkit etc.

Key Courses Undertaken

- Data Structure and Algorithm, Optimization Models, Discrete Mathematics, Linear Algebra, Python Core, Numerical Analysis, Computer Programming and Utilization, Computational Methods.

Position of Responsibility

Coordinator — Media and Public Relation, Abhyuday IIT Bombay [June 2022 - Present]

- A visionary social body channelizing the youth through impactful social initiatives — **25000+ footfall**— **600+ campaigns, 7+ nationwide competitions** which are growing rapidly and consistently.
- Cracked **social media partnership deals** with different media houses to extend the reach of Abhyuday
- Moderating and assisting the publicity plans of various initiatives being organised for diverse target audience and creating a sense of **Social Responsibility** and **Leadership** among the youth of India
- Publicised College Representative Program in more than 450 colleges scattered all across India

Extracurricular Activities

Cyber Security	• Accomplished course on Introduction to Ethical Hacking from recordrd drive. [2022] • Successfully completed course on How to use various Kali linux tools from recorded drive • **Detected vulnerability** in **Hostel 16 LAN** connecting internet of 18 rooms per floor. • **Vulnerability**— Using Kali Linux tool all the PC's of 18 rooms on each floor can be hacked.
Sports	• Successfully completed yearlong **National Sports Organization** course [2021] • Field event player in **Institute Atheletics Team**, IIT Bombay [Mar 2022 - Present]
Tech.	• Participated in **Remote Controlled Plane Competition** organized by [Oct 2022] Aeromodelling Club, IIT Bombay