RUDRANSH CHOUDHARY

ACADEMIC DETAILS

Year	Degree / Board	Institute	GPA / Marks(%)
---	B.Tech in Biochemical Engineering & Biotechnology	Indian Institute of Technology Delhi	5.55
2018	CBSE	Pioneer Convent School	85.6%
2016	CBSE	Akal Academy Ajitsar Ratia	9.4

PROJECTS

• **Minimize food waste in office cafeteria** (June 2023) :
- Analysed and processed data from MoveInSync app, weather details such as temperature and humidity .
- Developed a Machine Learning model using a **Random Forest Algorithm** and **SVM** for food forecasting to reduce food waste in office cafeteria.

• **Wine Quality and Taste Classifcation Using Machine Learning Models**: (July,2023)
- Assessed accurate data to find correlations among different features of the wine, which can affect the quality of the wine.
- In the employed models, the **Random Forest algorithm** demonstrated superior efficacy compared to Support Vector Machines and Linear Regression. The Random Forest model outperformed its counterparts, showcasing better predictive capabilities or accuracy in the given context.

• **Dyanamic Memory Allocator (Prof. Rahul Garg) : Data Structures and Algorithms, Java** (October, 2020)
- Developed Dynamic Memory Allocation (similar to malloc) program with LinkedList using First Split Fit algorithm.
- Implemented Binary Search Tree and Adelson, Velski and Landis(AVL) tree using Best Split Fit algorithm.

• **Developed a Simple Image Editor |Python| Prof. Prem Kalra, COL100)** (2020) :
- Developed a simple image editor using python, which performs a few basic tasks on an input image.
- Given an input image, converted it into an array and performed some basic operation for edge detection, path detection, then generate the output image

• **Analyzed and studied aptamers discovered in the past decade, focusing on predicting optimal candidates for pathogen diagnostic kits based on scientific research papers (Prof. Hariprasad P.)** (June 2023):
- Literature review: Examined more than 70 research papers to understand aptamers and their diverse applications comprehensively.
- Data-driven aptamer selection: Created a comprehensive library of aptamers discovered in the last decade in a spreadsheet and employed data analytic techniques to identify the most promising aptamers for diagnostic kits.

INTERNSHIPS

• **No Help To Big, Online/Marketing and Fundraising** (December, 2020 - February, 2021) : *Project Title*
- I was involved in creating awareness about the issue on social media platforms.I was involved in fundraising activitiesso I had to keep the connection with the donors and giving them regular updates about our work.

TECHNICAL SKILLS

• **Programming Languages**: Java, Python, C++, JavaScript

• **Analytics-specific Skills**: Data Aggregation, Data Cleansing, Data Analysis, Data Visualization (DataViz), Questioning, Problem Solving, Decision-Making, Data Calculations, Presentation

• **Software & Packages**: Jupyter Notebook, Pandas, Numpy, Matplotlib, MS Excel

EXTRA CURRICULAR ACTIVITIES

• **Winner , Inter-Hostel Ad-Making Competition** : Acted in the film and assisted in writing

• **Event Team member of Udiagiri Uphoria'21** : Annual Cultural fest of Udaigiri Hostel

• **Programming**: Actively participating in online coding contests and practice on coding platforms

• **Winner, Inter-Hostel Ad-Making Competiton**: Scripted and played a crucial part in the direction of a 10+ people teamto create the video for the ad-making competition (September 2019 - March 2020)

• **Runners Up, Inter-Hostel Photography Competiton** Contributed to the Hostel PFC team(December 2019 - May 2020)

• **Second Runners Up, Inter-Hostel Broll Challenge** : Played a crucial role in post-production(January 2020 - May 2020)

• **Second Position, PFC Trophy** Part of the team in the ideation and implementation 2019-20 (July 2021)

Disclaimer: All the information on this page is entered by student.

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IIT COURSE

Degree	Institute	CGPA
B.Tech in Biochemical Engineering & Biotechnology	Indian Institute of Technology Delhi	5.55

COURSES DONE

Intro. To Computer Science, Intro. To Electrical Engg., Calculus, Profe. Ethics & Social Resp., Language & Writing Skill, Electromagnetic Waves&qua.mec., Chemistry Laboratory, Language & Writing Skill-2, Introduction To Chemistry, Product Realization Through Manufacturing, Engineering Mechanics, Engg. Visualization & Comm., Linear Algebra & Diffe. Equa., Profe. Ethics & Social Resp.-2, Heat Transfer For Chemical Eng, Fluid Mechs. For Chem. Enginee, Differential Equations, Introduction To Biochem. Engg., Mass & Energy Balances In Bio., Principles Of Biochemistry, Transport Phenomena, Intro. To Biology For Engineer, Process Dynamics And Control, Contemporary Fiction, Chemical Engineering Lab I, Mass Transfer I, Environmental Science, Intro. To Biology For Engineer, Bioprocess Technology, Fluid Solid Systems, Chemical Engineering Lab - Ii, Recombinant Dna Technology, Bioseparation Engineering, General Microbiology, Bioprocess Plant Design, Applied Game Theory, Major Project Part 1 (bb1), Biomas Production, Minor Design Project - I, Bioinformatics, Biological Waste Treatment, Enzyme Science And Engineering, Current Topics In Biochemicalengineering And Biote, Dynamics Of Microbial Systems, Biomass Laboratory, Introduction To Psychology, Special Module On Inner Development 1, Atmospheric Chemistry And Air, National Sports Organisation, Minor Design Project - Vi

QUALIFYING EXAM

• **Joint Entrance Examination (JEE) Advanced Rank:** 2417 (OB)