# Rohan Chaturvedi

#### SOFTWARE ENGINEER

Examination	Majors	Institute	Year	CGPA/%
10th Standard	Science	CMS	2020-2024	98.8
12th Standard	Maths and Science	CMS	2018-2020	98.75
Undergraduate	Mathematics and Computing	IIT Delhi	2022-Present	9.8/10

#### SUMMARY\_

As a full stack web developer passionate about AI/ML, I merge dynamic web design with cutting-edge technologies. My expertise creates user-centric experiences while integrating AI/ML for predictive analytics, personalized content, and automation. Bridging innovation and user intuition, I craft the future of web development.

#### SCHOLASTIC ACHIEVEMENTS

• Secured a all india rank of 266 in JEE Advanced 2022

[August'22]

• Secured a all india rank of 432 in JEE Mains 2022

[July'22] [May'22]

• Cleared KVPY with a rank of **156** in SX and **726** in SA

[November '21]

• IOQM, IOQP and IOQC qualified with national ranking within 1%

#### KEY COURSES UNDERTAKEN.

#### **Mathematics and Statistics**

 Calculus(MTL100), Linear Algebra and Differential Equations(MTL101), Discrete Mathematics(MTL180), Linear Algebra(MTL104), Probability and Stochastic Processes(MTL106)\*, Optimisation(MTL103)\*

#### **Computer Science**

• Introduction to Programming(COL100), Data Structures and Algorithms(COL106)

#### **Electrical and Electronics**

Introduction to Electrical Engineering(ELL101), Principles of Electronic Materials(PYL102), Digital Electronics(ELL201)\*

### TECHNICAL SKILLS

Programming
Development
Machine Learning

C, C++, Java, Python, JavaScript, R, Solidity, SQL ,MongoDB ExpressJS, NodeJS, ReactJS ,Angular , NextJS ,Bootstrap ,MUI

RNN, CNN, Deep Learning, Attention, Transforers, OpenCV, YULOV,

Standard Regression, Classification, Clustering and Recommendation Algorithms

## PROJECTS\_

# Algorithmic Projects

#### **Information Retriever** | Text Ranking, BM25+, TF-IDF, Rake

October 2023 - November 2023

- It's a complete algorithmic approach to retrieve information for a paragraph summary or based on some queries
- Its extracts keywords using Rake algorithm and then using BM25+ the bad paragraphs are filtered and the
  goods are extracted finally using graph based algorithms similar to text rank for queries and exactly text rank
  for summary

#### **Expression Compiler** | C++, make, data structures

Aug 2023 - Sep 2023

• A compiler for evaluating expressions of all forms with a special support for infinitely large numbers which are dealt with using arrays, vectors and strings for all kind of operations

## Machine Learning

SpamODetector | Python, Keras, Tensorflow, RNN, Attention, NextJs, Tailwind

Jun 2023 - July 2023

- It's a trained ml model for detecting spam messages with a release in api endpoint for combining with email
- A ui interface interface has also been created using NextJs and Tailwind to enhance the user experience and to give him a try at using it

Natural Language Enhancer | Python, PyTorch, Tranfomers, Flask

Aug 2023 - Sep 2023

• A nlp model to pick and upgrade sentences based on the given query to improve the semantics

#### **VoiceToText** | Flutter, GoogleTranslate, Attention

Aug 2023 - Sep 2023

- A Flutter app for translating voice to speech with a special cover of playing the sign language for the deaf
- Special support for all major languages accross the world using

# Development

# IIT Delhi Career Portal | MongoDB, ExpressJS, ReactJS, Material UI EDC

Ongoing

(Expected by Dec '23)

• It's the IIT Delhi career portal which acts as a link between the Startups and the students

## IIT Delhi PhD portal | MySQL, NodeJs

Ongoing

CSC

(Expected by Jan '23)

• It's a project involving the creation of a portal for PhD students with easy access in the future

#### Parking | MERN stack, Tailwind

April 2023 - May 2023

• It's a commercial project taken on the idea of the creation of a portal for reserving parking at commercial places.

## POSITIONS OF RESPONSIBILITY \_\_\_\_\_

Executive

Aug 2023 - Present

**DevClub** 

- Associated with multiple projects within the club
- · Associated with organising and participating hackathons not only across campus and but also nation

Technical Executive May 2023 - Present

Board of Recreation and Cultural Activities

- Website Maintenance
- App development for the club

#### **Technical Executive**

August 2023 - Present

Board of Student Welfare

• Website Development for the club

## ACHIEVEMENTS & CERTIFICATIONS \_\_\_\_\_

- Winner of Best Frontend Developer DSOC
- Winner of IIT Delhi Codefreshers
- Winner of IIT Delhi Hackathon for best Discord Bot
- Codeforce max rating: 1642(mysteriocoder)
- Codechef max rating: 1721(mysteriocoder)
- Course:Machine Learning A-Z<sup>TM</sup>: AI, Python & R + ChatGPT Bonus [2023]
- Course; Modern Computer Vision™ PyTorch, Tensorflow2 Keras & OpenCV4