Pranjal Pratyush

Email: pranjalpratyush69@gmail.com   Mobile: +91-7645976707

Linkedin: zestypratyush   Github: zestypratyush   Codeforces: zestypratyush   Codechef: zestypratyush

EDUCATION

- **ABV-IIITM, Gwalior**   Madhya Pradesh, India
  Bachelor of Technology - Computer Science and Engineering; **CGPA: 8.35** *(Till 5th sem)*   2020 - 2024
  Courses: *Operating Systems, Data Structures, Design and Analysis Of Algorithms, Artificial Intelligence, Computer organisation and Architecture,Computer Network, Database Management System, Object Oriented Programming, Compiler Design*

SKILLS SUMMARY

- **Languages:**   Python, C, C++, SQL
- **Frameworks:**   Scikit, Matplotlib, OpenCV, TensorFlow, Keras, Numpy, Pandas
- **Tools:**   GIT, MySQL, HTML, CSS, Octave/Matlab
- **Platforms:**   Linux, Windows
- **Web Technologies:**   HTML,CSS,Node.js, Express.js, React.js, MongoDB, JavaScript

PROJECTS

Chatter- Chat App (Web Development):

- Developed a web app for chatting between users. It includes login and signup page for privacy built using **bcrypt and jwt token**.
- One can **search for registered users**. Used **socket.io** to create separate chatrooms to save bandwidth. One can add profile pictures. Know when another person is typing.
- Password is stored in **encrypted format** in mongoDB. One can **create groups** and become **admin**.
- Tech: Node.js, Express.js, React.js, MongoDB, Socket.io, bcrypt, Chakra UI, Axios

Image Captioning using Transformers (Natural Language Processing, Computer Vision) :

- Created an image captioning model with the help of transformers following **Attention is all you need** paper. Extracted feature vector of images using **VGG-16** to feed the transformer.
- Developed a **transformer from scratch** using tensorflow which maps feature vector of images (extracted using numpy) and dictionary of captions(tokens) on Flickr8k dataset. **BLEU scores** were about 30- 50.
- Tech: Python, Numpy, Pandas, TensorFlow, Matplotlib, Keras

Splits (Web development):

- Developed web app which can **keep track of money split** between **groups created** by the user. Backend is created using **Node and Express** and frontend in **React**. Axios is used for API requests.
- Implemented all **CRUD** operations on screen. Distribution of money is represented using pie charts. In order to use one would have to **login/signup** with the app.
- Tech: Node.js, Express.js, React.js, MongoDB, Axios

Bank Management System (Object Oriented Programming):

- Created bank management system using **OOP techniques**, which can perform several real time banking applications such as making new account, retrieve account details, transfer money from one account to another, credit, debit, etc.
- **File handling** is used to save the data on local machine so that data won't be lost after exiting from app.
- Tech: C++

ACHIEVEMENTS

- **518/21k** worldwide in leetcode biweekly contest
- **570/10k** worldwide at Codechef July Lunchtime
- **1/10k** worldwide at Codechef Long challenge (Div-4)
- **4 star** at Codechef - Max rating 1899
- Solved more than **500** competitive programming and data structure questions on multiple platforms such as leetcode, codechef, codeforces, CSES,etc
- Awarded MCM (Merit Cum Means) given by MHRD to top 3 students
- Ranked among top 0.7 percent aspirants out of 1.2 million aspirants who appear in JEE-MAINS 2020

MOOC

- Machine Learning by Stanford - Coursera
- Data Structures Specialization - Coursera