# Prateek Kumar

Satna, Madhya Pradesh

#### Technical Skills

- Languages and Tools: C++, Python, SQL, JavaScript, TypeScript, GIT, Github, Docker
- Frameworks and Libraries: ReactJS, Redux, Recoil, ExpressJS, HonoJS, NodeJS, NextJS, Flask-RESTful, Django, PrismaORM, Pandas, NumPy, Matplotlib, Tensorflow, Scikit-learn, Streamlit
- Databases and Tools: MongoDB, MySQL, PostgreSQL
- Services: AWS EC2, Vercel, Render, Cloudflare, NGINX

#### Projects

## Holocron - A Blogging Website — Source Code — TypeScript, ReactJS, HonoJS, Cloudflare, Prisma ORM, PostgreSQL

- Developed Holocron, a Medium-inspired blogging platform where users can create, edit, like and comment on articles. Built with a scalable, serverless architecture on **Cloudflare** for high availability and performance.
- Integrated JWT-based authentication and Zod Validation for secure access control and utilized Prisma ORM with **PostgreSQL** for efficient data management.
- Designed a responsive interface with **ReactJS Vite** and **Tailwind** for a seamless user experience, supporting dynamic content and optimized performance on a serverless environment.

## End-to-End Twitter Depression Prediction System — Source Code— Flask-RESTful, Selenium, ReactJS, SpaCy, Scikit-learn

- Built an end-to-end application with **ReactJS** for the frontend and **spaCy** and **Scikit-Learn** libraries to create an NLP model from scratch, achieving 70% accuracy.
- Developed Flask RESTful APIs for model integration, facilitating seamless interaction between the frontend and backend.
- Employed **Selenium** to scrape data from Twitter user profiles, enhancing dataset quality for analysis.

### End to End Diamond Price Prediction System — Source Code —Live Code — Python, Streamlit, Tensorflow, Scikit Learn

- Conducted comprehensive data analysis and cleaning on a gemstone dataset with 26,000+ records, ensuring data quality and accuracy using efficient pipelining techniques with Pandas, NumPy, Matplotlib, and Seaborn.
- Created an interactive user interface using **Streamlit** for seamless deployment, enabling easy access to diamond price predictions for users.
- Developed and optimized machine learning and deep learning models, achieving 96% accuracy in predicting diamond prices, evaluated using R<sup>2</sup> score, MAE, and MSE metrics.

#### Education

#### Lakshmi Narain College of Technology, Bhopal

St. Michael's Hr. Sec. School, Satna

Bachelor of Technology in Computer Science and Engineering (CGPA: 8.63)

Aug 2021 - Jul 2025

Madhya Pradesh, India

May 2020

Madhya Pradesh, India

## 12th Grade (82.4%) Achievements

- Secured a position in the top 5% merit list for NPTEL Discrete Mathematics Course by IIT Ropar. Link
- Secured an All India Rank (AIR) of 6339 in GATE Data Science and Artificial Intelligence examination 2024. Link.

#### Profile Links

Leetcode: codeWalker66

- Github: Prateekk02

- Kaggle: Prateekk02