# Dhruv Kumar Patwari

FULL STACK DEVELOPER · DATA SCIENTIST · GLASGOW, UNITED KINGDOM

□ (+44)07767946223 | 🗹 dhruvk090@gmail.com | 😭 dhruvkp090.github.io | 🛅 dhruvkumarpatwari | 📢 dhruvk090

## Qualification.

# University of Glasgow (Expected grade: Distinction) MSC DATA SCIENCE

Sep. 2022 - Sep. 2023

Glasgow, United Kingdom

- Courses: Deep Learning, Big Data, Text as Data, Web Sciences.
- **Dissertation Biomedical Named Entity Recognition**: Designed and curated a dataset to detect genotypes in biomedical text. Skillfully implemented and evaluated four distinct BERT models, culminating in a noteworthy F1 score of 0.51.
- **COVID-19 Visualization:** Achieved insightful user understanding by creating 3 distinct visualizations, meticulously cleaning data and conducting evaluations. These efforts led to an enhanced comprehension of user interactions with the system.
- **<u>Document Retrieval</u>**: Developed a Java-based horizontally scalable document retrieval pipeline using Apache Spark, retrieving a collection of over 10,000 documents in under 3 minutes.
- Social media manager of the Indian National Students Association, Glasgow.

## **Work Experience**

Zemoso Technologies

ASSOCIATE SOFTWARE ENGINEER

Feb. 2021 - Aug. 2022

Hyderabad, India

- A key collaborator in an agile development team specializing in the full-stack development of remote access laboratories and lab control software for life science discovery.
- Used ReactJS, Spring Boot, Python, GraphQL, Ruby on Rails and PostgreSQL.
- Achieved 90% reduction in API calls by implementing the capabilities to upload Excel files for bulk data CRUD (Create, Create, read, update and delete), resulting in enhanced efficiency and optimized resource allocation.
- Reduced development time by 30% by meticulously designing and developing an in-house library of Amino components.

Ernst & Young (EY) May 2019 - Jun. 2019

### MACHINE LEARNING INTERN / CONTRACT MANAGEMENT SYSTEM

Bengaluru, India

- Developed a user-oriented contract management solution that empowers users to efficiently oversee contracts and quickly locate desired information within the contract.
- Built a Flask-based user interface for contract uploads powered by a BERT Q&A model fine-tuned on legal content for accurate contract information retrieval.
- Achieved a notable 70% accuracy rate, leading to its integration as a product within A-Space, EY's esteemed AI solutions platform, in 2020.

# **Technical Experience**

#### Best Fantasy Team Picker - Python (Monte Carlo Simulation, Scraping), MS Excel

• **Data Analytics**: Accomplished 63% accuracy in selecting fantasy teams for each game, ultimately creating a player ranking system that significantly enhanced decision-making and performance outcomes.

## Predicting the winner of a cricket game - Pandas, scikit-learn, NumPy

• **Data Analytics**: Achieved a remarkable 65% increase in Naive Bayes Classifier leveraging ELO Rating to analyze extensive data of over 10,000+ teams. This resulted in highly reliable rankings and empower informed decision-making.

### Yoga Pose Classifier - JavaScript, PoseNet, TensorFlow

• **Computer Vision**: Develop an innovative computer vision web app utilizing a ridge classifier and <u>PoseNet model</u>. By accurately classifying 5 yoga poses with webcam integration, we delivered a groundbreaking user experience.

### Skills

- Programming / Scripting Languages:: Python | R | Java | JavaScript | SQL Typescript | HTML | CSS | C/C++
- Machine Learning: Pandas | NumPy | Scikit-Learn | PyTorch | TensorFlow.
- **Data Engineering:** Data mining | Data analytics | Natural language processing | Predictive analysis | Data modeling | Machine learning | Visualization | Reporting
- Model Deployment: Flask | Django | React | Docker.
- Languages: English (IELTS: 8.0) | Hindi | Marwadi | Telugu | Bengali.