

Chirdeep Singh Reen

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SUMMARY

Experienced Business Analytics Associate, graduated with an MSc in Advanced Computer Science with Data Science from University of Strathclyde (Distinction), specialising in developing end-to-end machine learning models, python based automation, and Analytics for data-driven business intelligence. Actively seeking roles in Machine Learning and Data Sciences, Engineering and Analytics.

EDUCATION

University of Strathclyde

Glasgow, UK

Masters of Science in Advanced Computer Science with Data Science

Jan. 2023-March 2024

- **Grade:** Distinction
- **Dissertation:** Image Similarity Based Recommendation System (Deep Learning)
- **Modules:** Machine Learning, Deep learning, Big Data, Distributed Information Systems

N.S. University of Technology

New Delhi, India

Bachelors of Engineering in Instrumentation and Control Engineering

Aug. 2016-Aug. 2020

- **Grade:** First Class Honours
- **Modules:** Data Structures and Algorithms, Artificial Intelligence, Cryptography

WORK EXPERIENCE

Cobot Systems Pvt Ltd

Bangalore, India

Business Analytics Associate

July 2021 – Sept. 2022

- Automated 40+ daily reporting dashboards using **Python**, **Tableau** and **AWS**, reducing report generation time by 70% and delivering key business metrics that enabled clients to make timely, data-driven decisions.
- Investigated and resolved 80+ bug and enhancement cases through **RCA**, **automated testing**, version control through **Git** and making strategic contributions to **CI/CD pipelines**, ensuring 99% system uptime across all analytics services and improving platform stability.
- Built and optimised Python-based **ETL pipelines** for 10M+ records across 15 datasets, reducing manual processing by 50%.
- Analysed data using **tableau** and validated **APIs** via Postman, resolving 50+ data anomalies to maintain end-to-end data integrity.
- Presented 5+ new features to non-technical stakeholders, leading to a 30% increase in engagement and adoption rates, as tracked through usage metrics.

PROJECTS

UK Energy Mix Analytics & Automation Pipeline

May 2025

- Built an end-to-end data engineering and analytics pipeline to analyse the UK's hourly energy mix, using the Carbon Intensity API.
- Automated data collection using Apache Airflow and processed datasets with Python scripts, enabling near real-time insights.
- Extracted key trends in fuel usage, renewable vs fossil contributions, and seasonal demand patterns, in a Jupyter Notebook.

Mental Health Monitoring for Social Media

Aug. 2024

- Developed a BERT-based sentiment analysis model for mental health detection from 10k+ social media posts, achieving 91.62% accuracy and enabling early intervention through automated flagging of distress indicators.
- Fine-tuned hyperparameters, outperforming baseline CNN and LSTM models in accuracy and F1-score during comparative analysis.

Image Similarity Based Recommendation System

Aug. 2023

- Developed a deep learning pipeline for a movie recommendation system using image similarity, integrating TMDB API and transfer learning (ResNet50) for feature extraction with reduced computational overhead using autoencoders.
- Performed cosine similarity-based clustering and achieved 75% similarity in matching content metadata; enhanced user experience by surfacing visually similar movies, supporting personalized recommendations for streaming platforms.

SKILLS, LANGUAGES AND CERTIFICATIONS

- **Programming Languages & Databases:** Python (PyTorch, Tensorflow, ScikitLearn, PySpark, Numpy, Pandas), SQL (MySQL, PostgreSQL), R/Rstudio, NoSQL/MongoDB, Linux/Unix CLI.
- **Tools & Technologies:** Git/Github, VS Code, Jupyter, Tableau, AWS, Microsoft Excel, Postman, APIs, Apache Airflow, ETL, CI/CD.
- **Languages:** English (Fluent), Hindi (Fluent)
- **Certification:** AWS Certified Cloud Practitioner (CLF-C02), AWS AI Practitioner (in progress)