Krishna Pal

Data Scientist

PROFILE

Dynamic Data Scientist with expertise in NLP, Python, ML, and collaborative model enhancement for precise data extraction. A track record of translating complex business requirements into technical solutions. Demonstrated leadership in exploratory data analysis and innovative project execution.

SKILLS

Python • Machine Learning • AWS • NLP • Git - GitHub • Pandas • MySQL • Data Mining

Flask • Restful APIs • Docker

PROFESSIONAL EXPERIENCE

EXL

Assistant Manager - Data Scientist

January 2024 - present

- Documented extraction methodologies and model performance metrics, promoting transparent processes and facilitating knowledge sharing across the team. Ensured comprehensive documentation for future reference and collaborative understanding.
- Guided and **mentored new team members**, facilitating their seamless integration and providing support in navigating projects and team dynamics.

Senior Executive - Jr. Data Scientist

April 2022 - December 2023

- Implemented state-of-the-art **Natural Language Processing** models, orchestrating collaborative efforts to refine algorithms and features.
- Achieved precise data extraction, streamlined intricate insurance document handling, and expedited data processing with an overall **85% accuracy rate**.
- Led the implementation of **automated validation procedures**, overseeing the production of timely and comprehensive reports on model performance. This initiative resulted in approximately 90% reduction in manual validation time, decreasing it from **2 hours to just 10**
- Translated complex business requirements into technical solutions, fostering cross-functional **collaboration with developers** and analysts to align technology with business needs.
- Conducted in-depth **exploratory data analysis**, uncovering valuable insights and patterns to inform model development and decision-making processes.
- Played a key role in developing Proof of Concepts (POCs), demonstrating innovative ideas through practical projects.

EDUCATION

Masters of Science in Data Science,

October 2023

Liverpool John Moores University

Bachelors of Science in Information Technology,

May 2021

Mumbai University

CERTIFICATES

AWS Certified Cloud Practitioner $\mathscr O$ AWS

Executive PG Programme in Data Science *⊗* IIIT - Bangalore

PROJECTS

Eye For Blind \varnothing

- Objective: Build a deep learning model to **assist visually impaired** individuals by generating spoken image captions.
- Solution: Implemented a streamlined approach involving CNN-based image feature extraction, RNN-based caption generation, and attention mechanisms. The code uses pre-trained Inception net V3 weights, building and training **Encoder**, **Decoder**, **and Attention** models using **subclasses**, and converting **captions to speech** for an accessible image interpretation experience.

Gesture Recognition *⊘*

- Objective: Design and implement a **gesture recognition system** for smart TVs, enabling users to control their devices through intuitive hand movements captured by the webcam.
- Solution: Developed and trained multiple models, including Conv3D and CNN + RNN, with the topperforming Conv3D model achieving a validation accuracy of 79% and the CNN + GRU Model reaching 81% accuracy.