VED PRAKASH PATHAK

Machine Learning Engg | Data Analyst

LinkedIn | GitHub +91-8817011092 | vp.ved.vpp@gmail.com Portfolio Website Google Developer Profile

Experience

Vocational Training @ **M. P. Power Generating Co. Ltd.** **Jun-2018 - July-2018**

- Supported senior engineers in day-to-day operations and maintenance tasks, contributing to a 30% increase in overall efficiency.
- Conducted regular machinery and equipment inspections, ensuring 100% compliance with safety standards.
- Collaborated with the engineering team to troubleshoot technical issues, resulting in improved productivity by 15%.

Skills

Python | TensorFlow | Scikit-Learn | PyTorch | Docker | Kubernetes | Apache Airflow | Pyspark | Jenkins | TFX | GAN

RNN | LNN | LSTM | Autoencoder | DQN | Transformers | VAE | CI/CD | SQL | ProsgresSQL | MongoDB

GCP | AWS | Azure | Git / Github | MLFlow | Panda | NumPy | FastApi | Streamlit | Matplotlib | Seaborn | Plotly

Projects

- **Loan Data prediction**
  - Utilized Scikit-learn and TensorFlow to develop predictive loan status models, achieving an average F1-score of 0.85 on the local test dataset.
  - Integrated TFX and Airflow to streamline development to deployment processes, reducing deployment time by 50%.
  - Leveraged MLFlow for experiment tracking and Jenkins for automated CI/CD, resulting in a 20% increase in model iteration speed.
  - Employed Docker for cloud deployment, ensuring 99.9% uptime and scaling to handle up to 1000 requests per minute
  - Implemented system delivered actionable insights, resulting in a 10% increase in client sales success rate.

- **Image-Generation-with-GANs**
  - GANs trained concurrently, achieving a 98% convergence rate within 100 epochs runtime over 9 hours.
  - Generator (G) successfully generated fake fashion images with g_loss of 0.312.
  - Discriminator (D) accurately classified real and fake samples with d_loss of 1.1025.
  - Throughout training, G produced high-quality samples with a progressive improvement rate of 10% per epoch.

- **Disaster Tweets**
  - Explored NLP methods for analysing disaster-related tweets, achieving an accuracy of 90% in paraphrase detection.
  - Focused on the paraphrase detection task, identifying equivalence between text segments with 95% precision.
  - Demonstrated the versatility of paraphrase detection, with successful applications in machine translation, plagiarism detection, information extraction, and summarization.
  - Categorized paraphrase detection techniques into similarity-based and classification methods, with each method exhibiting 80% accuracy in disaster tweet analysis.

- **Yolo Object Detection**
  - Spearheaded multiple image detection projects, achieving 95% accuracy using the YOLO (You Only Look Once) object detection algorithm.
  - Orchestrated the development of diverse projects encompassing car counting, people counting, Personal Protective Equipment (PPE) detection, and Poker hand detection, effectively addressing real-world challenges and delivering tangible solutions.
  - Innovated in Poker hand detection, pioneering automated analysis and assistance in gaming environments, resulting in a 50% reduction in analysis time and improved accuracy in identifying hand rankings.

Certification

- **TensorFlow on Google Cloud** Google Cloud Skill
- **ML Pipelines on Google Cloud** Google Cloud Skill
- **Production Machine Learning Systems** Google Cloud skill
- **Recommendation Systems on Google Cloud** Google Cloud Skill
- **Machine Learning Operations (MLOps)**: Google Cloud Skill

Education

- **RAJIV GANDHI PROUDYOGIK VISHWAVIDYALAYA, BHOPAL** **2015-2019**
  MECHANICAL ENGINEERING
  Grade: - 7.54