Piyush Gupta

New Delhi (India) | (+91) 9958164478 | piyushgunjan09@gmail.com | Piyush-Guptaa | piyush-gupta-09 | Portfolio

Innovative Data Scientist with expertise in Machine Learning, Deep Learning, and Predictive Analytics, specializing in recommendation systems, optimization models, and AI-driven automation. Experienced in end-to-end ML pipelines, big data analytics, and cloud-based AI deployments to drive scalable solutions. Proficient in Python, SQL, Spark, TensorFlow, and R, with a strong foundation in MLOps, data engineering, and smart data visualization. Passionate about building AI-powered products that enhance user experience and optimize business performance.

WORK EXPERIENCE

Fluor Daniel India Private Limited

Harvana, India

Associate Data Scientist

Jul 2024 - Present

- Developing an AI-powered recommendation model that helps project managers build data-driven narratives by dynamically suggesting the next best visualization from 250+ charts based on project context and chart observations.
- Automating ETL pipelines using R and SQL to optimize data ingestion, transformation, and processing for scalable and efficient analysis, while leveraging ggplot2 for insightful data visualization.
- Building interactive dashboards with D3.js, JavaScript, and Plotly enhances real-time decision-making and enables intuitive analysis of large-scale EPC projects.
- Benchmarking EPC projects across various sizes and global locations, analyzing execution efficiency, cost trends, and risk factors to enhance strategic planning.

Fluor Daniel India Private Limited

Haryana, India

Data Scientist Intern

Mar 2024 - Jul 2024

- Assisted in developing predictive models for project analytics, focusing on trend analysis and performance forecasting.
- Automated data extraction, transformation, and validation processes using R and SQL, reducing manual effort by 50%.
- Collaborated with senior data scientists to enhance data quality and preprocessing pipelines.

Centre for Railway Information Systems

New Delhi, India

Software Developer Intern

Jul 2023 - Sep 2023

- Developed a cross-platform mobile app using Flutter, enabling real-time coach tracking and optimizing train scheduling for improved railway operations.
- Designed and integrated an SQL database, enhancing data accuracy, automating record management, and improving system efficiency in train time management.

PROJECTS AND PUBLICATIONS

FusionEXNet: An Interpretable Fused Deep Learning Model for Skin Cancer Detection

- Developed a deep learning model integrating EfficientNetV2S and XceptionNet for enhanced skin cancer detection. Achieved 90.83% accuracy using the HAM10000 dataset and Explainable AI techniques for model interpretability.
- Published in: International Journal of Computers and Applications, 2024 (PDOI: 10.1080/1206212X.2024.2385923)

Privacy-Preserving Credit Card Fraud Detection using Federated MultiLayer Perceptron Neural Network

Developed a federated deep learning model for secure credit card fraud detection. Achieved 97.34% accuracy, ensuring privacy-preserving decentralized learning using TensorFlow Federated.

Enhancing Early Alzheimer's Disease Detection: An Ensemble Approach

- Designed an ensemble deep learning model combining ResNet50, DenseNet, MobileNet, VGG16, Inception, NasNet, Xception, and EfficientNet for improved Alzheimer's disease detection. Achieved 99% classification accuracy on the Dementia Classification dataset.
- **Published in:** SSRN, 2024 (DOI: 10.2139/ssrn.4906497)

BOOKMYPARKINGLOT – Smart Parking Management App

- Developed a Flutter-based mobile app with real-time parking availability, Google Maps integration, and Firebase backend, reducing search time and congestion.
- Designed a two-way system for users and admins, enabling seamless reservations, automated check-ins, secure payments, and parking history tracking.

SKILLS

- **Programming & Development:** Python, R, SQL, Dart, JavaScript, C++
- Machine Learning & AI: TensorFlow, Keras, Scalable ML Pipelines, Predictive Modeling, Deep Learning
- Big Data & MLOps: Apache Spark, Data Engineering, Model Deployment
- Analytics & Data Visualization: NumPy, Pandas, Seaborn, Matplotlib, Ggplot2, D3.js
- Mobile & Web Development: Flutter, Android Studio, Firebase, REST APIs

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY

New Delhi, India

Bachelor of Technology, Computer Science

Jul 2024

GPA: 9.1

Student Researcher Award (Demonstrating Excellence in Research)

Apr 2024 Mar 2024

Best Paper Award at ICACCIS

2022-2023

Smart India Hackathon Grand Finalist

- Relevant Courses: Data Structures & Algorithms, Software Engineering, Database, Operating Systems