# SANJIT PALIWAL

■ sanjit.paliwal@utexas.edu 📞 +1(512)-998-7164 👂 Parsippany, New Jersey in sanjit-paliwal-90750266/ 🗘 sanjitpal09

## **SUMMARY**

Data Scientist with 3+ years of experience in predictive and prescriptive analytics using Python, R, SQL, Tableau & Splunk. Skilled in Machine Learning & AI, Time Series Analysis, Visualization, Geospatial Analysis and Statistics.

## **SKILLS**

**CODING:** Python, R, SQL, MATLAB, SAS **TOOLS:** Tableau, MS Excel, Git, Splunk

PACKAGES: Keras, Tensorflow, scikit-learn, pandas, Koalas, dplyr, numpy, scipy, bokeh, flask, geopandas

DATABASES: Hadoop (Hive & Hue), Teradata, Oracle, Microsoft SQL Server

MACHINE LEARNING & AI: Deep Learning (CNNs & RNNs), Boosting (XGBoost, LightGBM, GBM & CatBoost), Random Forests, Decision Trees,

Time Series (Forecasting, Clustering and Classification), Logistic Regression, PCA, Anomaly Detection, Topic Modeling (LDA),

Clustering (K Means & Hierarchical), Interpretable ML (LIME & SHAP)

STATISTICS: Regression (Linear, Lasso & Ridge), ANOVA, Design of Experiments

## **WORK EXPERIENCE**

### Verizon · Consultant-Data Science, Basking Ridge, New Jersey

Aug. 2018 to Current

Network

- Optimized the Maximum inventory levels for 83k Network devices kept at the Central Warehouse that provided a Working Capital reduction of \$20
  Million. Utilized Time series forecasting techniques (ARIMA, Croston and ETS) to forecast monthly demand and then identified months of inventory to
  keep based on demand, returns, failure rate, repair yield, repair turn around time and other system parameters. Presented this project at the Ai4:
  Retail, Supply Chain and Marketing Summit.
- Working on a project to identify root cause of Out of Box failures of Network devices and then determine ways to reduce their failure rates. This will provide an annual savings of \$1 Million per year

#### Wireless

• Performed Geospatial Analysis on Direct to Customer shipments data and created a dashboard to bring visibility into the in-transit losses accumulating to \$30 Million an year

#### Fios

- Utilized Time Series Hierarchical Clustering using Dynamic Time Warping to model faulty Fios equipments behavior in the network. Created Splunk queries to geolocate and facilitate their pro-active removal from the network before Customer initiates tickets about the same. This resulted in annual savings of \$300 k
- Built a LSTM Autoencoder based Anomaly Detection model for predicting Fios Video Trouble Tickets on time series data collected from customer premise equipment

#### BNSF Railway · Intern Fellow, Fort Worth, Texas

Sept. 2017 to Dec. 2017

Aug. 2013 to July 2016

- Performed exploratory data analysis on the Freight Rail Transportation data
- · Performed feature engineering and built models to Estimate Run Times of a Railcar

#### Indraprastha Gas Limited · Deputy Manager, New Delhi, India

- Analysed data acquired from sensors to aid in operations & maintenance activities
- Built reports for analyzing machine breakdowns and inventory consumption

## **EDUCATION**

## Cockrell School of Engineering, University of Texas at Austin

Master of Science, Operations Research & Industrial Engineering, May 2018

GPA: 3.9/4.0

#### Netaji Subhas Institute of Technology, University of Delhi

Bachelor of Engineering, Instrumentation & Control Engineering, May 2013

Percentage: 74.33/100

# **HACKATHONS**

#### Convergent - ExpeditionHacks Austin 2017

July 2017

- Grand Prize Winning Project at the ExpeditionHacks Austin 2017 hosted by Blue Compass
- Built a visualization tool using AI & PCA that provides actionable insights on urban policy

#### MySafe - IBM Cognitive Builder Faire Austin 2017

May 2017

Helped Apartment seekers with a web app that tells them about the current mood of the residents of these apartments (sentiment analysis on reviews)
and the crime rate