

JASPREET SINGH

APPRENTICE LEADER MU SIGMA BUSINESS SOLUTIONS PVT. LTD.

SUMMARY

A firm believer in learning over knowing and extreme experimentation
I am passionate about working on ideas that are innovative and impactful

WORK EXPERIENCE

DEC 2018-TILL DATE

Neural Networks Based Demand Forecasting

- One of the leader in asian retail industry wanted to improve their demand forecasting framework to reduce Out of Stock occurrences
- Developed Recurrent Neural Network (RNN) based demand forecast model to achieve weekly demand forecasting at Product-Store level
- Reduced Out of Stock occurrences by 6%-20% (for various categories-SKUs), compared to per-existing predictions
- Tech Stack Used: Alteryx, Python, Keras and TensorBoard

Computer Vision & Deep Learning Based Brick & Mortar Customer Analysis

- Understanding offline customer's behavior patterns to make better decisions in store operations (staff management, product placements, etc)
- Implemented in-store video analytics solution using Single shot multibox detector (SSD) based YOLO V3 solution
- to deliver hourly data about customer entry, exit & in-store count, number of aisle visits, traditional checkout counter count, Scan-&Go counters encouragement etc
- Tech Stack Used: Python, YOLO v3, OpenCv

Early Trends Detector

- Eliminated sourcing & procurement team's invisibility to unseen trends
- Developed Natural Language Processing based model lead to 3 fold decrease in Out-of-Stock scenarios
- Transformed solution was adopted by clients as their official banner product for 2019 Black Friday Sale
- Tech Stack Used: Python, NLTK, Tableau

SKILLS

Machine Learning:

Linear Regression, Logistic Regression, SVM, KNN, Decision Tree & Random Forest, Ensemble Models, Clustering

Deep Learning:

Neural Network, Convolutional Neural Network, Natural Language Processing

Tools:

Pandas, Numpy, Matplotlib, Seaborn, scikit-learn, ARIMA, Prophet, TensorFlow, Keras, NLTK, OpenCV, Yolo V3, Git, Databricks, Datarobot, Azure Taskboard, IBM Blue Works, PowerBI

Deployment:

VS Code, Flask, Azure Databricks, Azure Datalake & GCP Docker

Misc:

Git, GitHub, Probability, Python, SQL, Statistics

EDUCATION

Bachelor of Technology in Computer Science & Engineering

Lovely Professional University

Class XII-CBSE | Natwar Gov Multipurpose School

Class X-ICSE | Carmel Convent Senior Secondary School

CONTACT INFORMATION

+91-978095-3556 +91-860271-3556
contact@juspreet51.in
blog.juspreet51.in
linkedin.juspreet51.in
github.juspreet51.in
Bangalore, KA - 560066

HOBBY PROJECTS

JusPy: ML Framework
pip install juspy
Emoji Recommender
<http://emoji.juspreet51.in>
Student Loan Default Prediction
<http://student-default-preds.juspreet51.in>
Campaign Analysis
<http://campaign-analytics.juspreet51.in>

Awards & Accomplishments

Published paper: Information Theory in Machine Learning
<http://paper2.juspreet51.in>

Developed ML Algorithms From Scratch

Implemented Regression and Classification algorithms from scratch in python

Andrew Ng's team coordinator

Coordinated meetups and QnA session with DeepLearning.AI team

Sport Award: Mu Sigma, Sept 2021

For excellent work in delivery & team management

RELEVANT COURSEWORK

HoML 2nd Edition:

Hands on Machine Learning authored by Aurelien Geron

Multivariate Calculus:

A calculus book Authored by James Stewart

Machine Learning:

Andrew Ng's Coursera course

NLP Specialization:

Ongoing: Course 3 of 5 courses specialization by DeepLearning.AI

FUTURE ENDEAVORS

The Deep Learning:

A book by Ian Goodfellow, also called as Bible of Deep Learning

blog.juspreet51.in:

A not-for profit effort to bring zero cost information for public

INTEREST

Reading:

Philosophy and Literature

Blogging:

Artificial Intelligence and Machine Learning

Sports:

Boxing and Minecraft