# JASPREET SINGH

## TRAINEE DECISION SCIENTIST
## MU SIGMA BUSINESS SOLUTIONS PVT. LTD.


## CONTACT INFORMATION

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## HOBBY PROJECTS

**JusPy: ML Framework**
pip install juspy

**Emoji Recommender**
http://project4.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

## 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

**Random Forest Based Production Halts Reduction**
Sept 2020-Jan 2021 Team Size: 11

- Assisted an aluminum conglomerate to reduce unplanned maintenance shutdown, production halts and improve equipment life cycle
- Proposed Random Forest based predictive solution lead to operational savings of over $30MM annually in production deferral costs
- Tech Stack Used: Python, Tableau, Scikit-Learn, Tensorboard, Azure DataBricks

**Computer Vision & Deep Learning Based Brick & Mortar Customer Analysis**
Oct 2019 – Feb 2020 Team Size: 3

- Understanding offline customer's behavior patterns to make better decisions in store operations (staff management, product placements, etc)
- Implemented in-store video analytics 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**
Dec 2018 – Nov Team Size: 6

- 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:**
Flask & Docker

**Misc:**
Git, 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