

Vivekpandian Veerapandian

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Data Scientist with 3-years of experience in recommending data-driven analytical solutions by building Linear and Non-Linear models. Equipped with in-depth knowledge and practice of deploying scalable end-to-end machine learning models in production.

PROFESSIONAL EXPERIENCE

Senior Data Scientist, Ordermycake.in

Jan 2015 – Jun 2018

- Generated **18% increase in revenue to \$5k** in 2017 by leveraging sentiment analysis, extracting topics and key phrases on customers feedback, and suggested a new payment method to solve delivery problems [**Python, NLP, AWS S3, EC2**]
- Identified **4500 potential churn customers** by developing ML models and retained 36% by offering them discounts [**R**]
- Reduced the **cost of returns 6%** by developing end-to-end **ML pipeline** to determine fraudulent from user support tickets
- Revamped coupon mailing strategy for 3 customer segments by clustering using **K-means** and identifying the most engaging coupons that increased headcount 12% [Unsupervised Learning]
- Implemented marketing campaign using A/B testing to identify effective campaign, that **boosted the sales 30%**
- Recommended optimized price for products that **increased \$3K in yearly revenue** by web scraping and data mining using Python scripts to analyze competitor product prices
- Led a 10-member cross-functional team to build B2C platform to expand the **operations from 2 to 8 cities**, and presented findings and insights to stakeholders [**Tableau**]

Software Engineer, Cluster Wireless Software Ltd

Mar 2012 – Sep 2014

- Designed ETL pipeline using SQL to extract data of IoT sensor from 4 databases and flat files from Linux system [**MYSQL, C++**]
- Procured project requirements, worked on sprint planning, root cause analysis, code reviews and collaborated with clients based out of different locations globally

INTERNSHIP EXPERIENCE

Data Science Intern, SuperWorld Inc, United States

Sep 2020 – Nov 2020

- Predicted the likelihood of a purchase from clickstream data using Support Vector Machine and improved the precision rate to 76% by adding new features and hyperparameter tuning [Python, **Google Analytics**]
- Developed an interactive web app in **R-shiny** that does real-time end to end sentiment analysis of SuperWorld's tweets

DATA SCIENCE PROJECTS (Github: <https://github.com/vivekpandian08>)

Music Library Database Design, Data Modeling and Data Storage

SQL, Python, AWS, Redshift, S3, Spark

- Designed a star-schema based music database on Amazon Redshift, **built ETL pipeline** to extract raw data from S3 bucket into a staging area in **Redshift** and transformed it to build the database using data warehousing, SQL and Python
- Developed data lake for big-data analytics that reads data from S3, processes using Spark, and writes parquet files on S3

Document Classification using Deep Learning

Python, Natural Language Processing, GCP, PyTorch

- Leveraged web scrapping to scrape 110k news articles, extracted features by pre-training Word2Vec, Glove, BERT embedding
- Implemented Convolutional neural network model to classify documents into 4 categories & achieved 92% accuracy

Vehicular Injury Predictive Model for New York City

Python, Statistics, Regression

- Performed hypothesis testing, deviance & multi-collinearity tests to estimate association of 19 features in road-collision, implemented Generalized Linear Model(GLM), and found 70% high risk for pedestrian & 92% risk for motorist

Credit Card Fraud Detection

Python, Supervised learning, Classification

- Performed quantitative analysis and feature selection. Experimented with algorithms like SVM, KNN, Naïve Bayes, Random Forest, and Neural Networks with **SMOTE** resampling using **PySpark** to predict fraud and achieved AUC of 0.82

EDUCATION

M.S., Data Science and Business Analytics, The University of Texas at Dallas

GPA: 3.7

Dec 2020 (Graduated)

B.E., Electronics and Communication, College of Engineering Guindy, India

May 2011

TECHNICAL SKILLS

Programming : Python (Scikit-learn, Pandas, Numpy, TensorFlow, PyTorch, Keras, NLTK, PySpark), R, SQL, SAS

Data Visualization : Tableau, Power BI, Shiny, GGPlot2, Plotly, Matplotlib, Seaborn, Bokeh

Databases & Big Data : BigQuery, MySQL, PostgreSQL, Oracle, GraphQL, Redshift, MongoDB (NoSQL), Hadoop, Hive, Spark

Certifications : UDACITY Nanodegree (NLP, Data Engineering), Coursera(Deep Learning Specialization - **ANDREW NG**)