

**SUMMARY AND CORE COMPETENCIES**

- High aptitude for problem identification with ability to develop and implement quantitative models for decision making.
- Capable of working with multiple programming languages, software, unstructured large datasets and business domains.
- Skilled at communication and can seamlessly integrate into a team environment or in a leadership role.

**TECHNICAL SKILLS**

Programming Languages: Java, C, Embedded C, C++, JavaScript

Statistical Modelling and Analysis: Python, R, SAS, SQL, MATLAB, Excel, edgeSuite, Tableau, Power BI

Machine learning libraries: Weka, Scikit-learn, H2O, TensorFlow, Keras, Pandas, NumPy, SciPy, Matplotlib, PyTorch

Database Management: MongoDB, MySQL, Hadoop – MapReduce, pyspark, Hive, Impala, Scoop, Flume

**WORK EXPERIENCE****Big Data Analytics Intern, Apilation.ai, Mill Valley, CA - Dallas, Tx - Remote**

Aug 2018 - May 2019

- Built a recommendation engine in python to recommend Tv programs a customer would like based on set top box's viewership history. Used IMDB dataset to enrich the data by adding genres to understand what is being watched.
- Built pipelines for a xgboost prediction model to predict failure of a set top box of Frontier Communication's (FC) using R and python. Productionized model refreshes its prediction every 15 minutes on streaming data.
- Designed, built and tested aggregation pipelines for circuit billing reconciliation engine of tariffs for FC in jSonar, working in an agile environment which could help Frontier achieve additional revenue of upto \$6 million and save manual audit by 6000 hours. Created visualizations to provide statistical insight of results. Performed data profiling to generate value.

**Junior Data Analyst, Shree Jeenmata Dyeing & Printing Mills Private Limited, Mumbai, India**

Dec 2016-July 2017

- Implemented time series modelling to understand seasonal flow of demand and requirement of raw material. Formed forecasting patterns to predict inventory levels. Optimized resource allocation in production system by applying LEAN SIX SIGMA, KAIZEN and 5S, obtaining a 11% reduction in monthly resource cost.

**Assistant Engineer, Rean Watertech Private Limited, Kolkata, India**

Dec 2015-Nov 2016

- Part of a four-member team successful in bagging 3 rural water supply projects of \$20 million where I assessed price bids for feasibility of business potential - conducted procurement risk analysis, tender stage price estimation, trend analysis, work site evaluation. Designed sections of conveyor and bulk material handling equipment.

**PROJECTS**

- Developed, trained and test machine learning (ML) models to recognise 5 different hand postures from a dataset of 12 users using MATLAB and Python. Obtained best model accuracy of 0.975 by using bagging trees classifier.
- Analyzed comments on articles of New York Times to predict which comments provide more insights than others using natural language processing, logistic regression, multilayer Perceptrons, clustering in pyspark and topic modeling.
- Applied sliding window model to predict failure for paper manufacturing machine with multivariate time series data.
- Developed cryptocurrency prediction model with multiple activation functions with a validation loss of 0.29– 0.37.
- Built object detection models with the help of TensorFlow, OpenCV and PyTorch. – cats vs dogs, food, cell phones.
- Performed multivariate regression analysis to predict the price of Bitcoin. Evaluated factors impacting the price of Bitcoin and conducted hypothesis testing and model validation using SAS, Python and Excel.
- Developed simulation model of delivery and installation of solar panels for Sunrun Inc. using Witness Horizon and Simio. Optimized KPI's to improve process lead time from a multiple day to one-day installation system.
- Designed and analyzed a two-factor experiment to test the pH level of coffee made from 3 roasts and 2 coffee machines.
- Designed and fabricated 3d printer of build volume 200 mm<sup>3</sup> to produce prototypes in PLA and ABS.

**EDUCATION**

University of Texas at Arlington, Arlington, TX

**Master of Science in Industrial Engineering, GPA: 3.8** (Awarded for academic excellence by University)

May 2019

**Courses:** Statistics, Regression Analysis, Data Mining, Operations Research, Design and Analysis of Algorithms, Decision Analysis, Simulation, Engineering Economy, Design of Experiments, Big Data Analytics, Production and Inventory control.

**MOOCs:** Machine learning and Deep learning - Andrew Ng & Fast.ai, Social Network Analysis- Lada Adamic & Michael Kearns

SVKM's NMIMS University, India - **Bachelor of Technology in Mechanical Engineering**

Aug 2015

**HONORS AND ACTIVITIES**

- Ranked in list of top 12 solvers globally conducted engineering competitions by Ennomotive.com
- Research paper publication in International journal on Challenges in fabrication of basic 3D printer.
- Winner of technical research paper presentation at ASME International conference.