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## Summary

Experienced Data Scientist with a demonstrated history of working in Finance domain using Data analysis and Modern Forecasting and Prediction techniques. Also, an ex-Software Engineer in the computer software industry as full stack web developer who can write RESTful and soap server APIs and create web-based client applications. Passionate about Computer Science | Data Science | ML/AI Enthusiast. Quick learner and open to work in new technology areas.

## Experience

### SOFTWARE ENGINEER AT MAHINDRA COMVIVA — DEC 2015 – JULY 2019

- **Role:** Full stack web developer in Business Support Services domain.
- **Responsibilities:** Gather requirements, design, develop, test and maintain features.
- **Skills:** Primarily involved in server-side programming and writing RESTful and Soap server APIs using Java, Spring Boot, MySQL and Oracle. Secondly involved in client-side programming using JavaScript, ReactJS, HTML and CSS. Also wrote several processes for batch jobs using Spring Batch.

Being a part of a small dev team since the very beginning, have written many of the modules from scratch.

### SOFTWARE ENGINEER INTERN AT NIGHTSTAY (PAYTM) — AUG 2015 – DEC 2015

- **Role:** Backend Developer in Hospitality and Tourism domain.
- **Responsibilities:** Developed APIs for Content Management System and Extranet for Hotel.
- **Skills:** Primarily involved in server-side programming and writing RESTful APIs using PHP, MySQL. Secondly involved in client-side programming using JavaScript, HTML and CSS.

### DATA SCIENCE INTERN AT ALGOLABS — MAY 2020 – AUG 2020

- **Role:** Data Scientist in Finance and Economics domain.
- **Responsibilities:** Risk estimation of Volatility Risk and Study of Major economic events and policy changes on financial health for Unlisted Firms using Centre for Monitoring Indian Economy (CMIE) database which include data of more than 40,000 Indian firms over 30 years.
- **Skills:** Multivariate regression and time series analysis technique (ARIMA and SARIMAX) used to study the effect. We used R and Python extensively during the project. Libraries and packages used were Vignettes in R for missing data imputation and scikit-learn in Python for building Machine Learning Models. Exploratory Data Analysis techniques in Python were also used.

## Projects

### Integrated Provisioning and Customer Support Platform (CRM)— DEC 2015 – MAR 2017

IPACS solution ensures uniformity across all major business processes like customer interaction management, billing and provisioning. IPACS BSS (Business Support Services) simplifies the overall business Management and aids decision making via converged reporting and analysis.

<https://www.mahindracomviva.com/wp-content/uploads/2017/08/iPACS-Convergent-BSS.pdf>

### Sales and Distribution— MAR 2017 – OCT 2018

This application enables Telecom operators to maintain all types of channels with varied business, commission and target rules with enhanced inventory and warehouse management. Supports the dealer lifecycle in an end-to-end manner and Real-time view of existing stock and ongoing sales.

<https://www.mahindracomviva.com/products/business-solutions/sales-and-distribution.htm>

## **Study of Major economic events and policy changes like Demonetization and GST on financial health of a firm— MAY 2020 – JUNE 2020**

Study of how the financial health of the firm changes due to major economic policy changes using CMIE database which include data of more than 40,000 Indian firms over 30 years. Multivariate regression and time series analysis technique (ARIMA and SARIMAX) used to study the effect.

## **Risk estimation for Unlisted firm— JUNE 2020 – JULY 2020**

There are thousands of firms which are not listed in the stock market. Therefore, we don't have their adjusted close price. Hence, we cannot estimate the Volatility Risk and VaR for these unlisted firms. The statistical predictive model to predict the financial risk of an unlisted firm was used. Multivariate regression and time series analysis technique (ARIMA and SARIMAX) was used to evaluate risk.

## **Multiple Minimum Support for Apriori Algorithm**

Mining Association Rules with Multiple Minimum Supports implemented on UCL document data using Java.

## **Weather forecast using Time Series Analysis**

Time Series Analysis and Weather Forecast using ARIMA model. Time-Series data has seasonality. The data have been downloaded from the website <http://rp5.ru/>. The data are average daily temperatures collected by the weather station.

## **Skills**

### **Programming Languages:**

Python (Proficient), Java (Proficient), MATLAB (Prior Experience), R (Intermediate), C, C++ (Comfortable), JavaScript, SQL.

### **Tools/API/Framework:**

TensorFlow, SARIMAX/ARIMA, NumPy, Pandas, Hadoop, Apache Spark, GIT/SVN, ReactJS, jQuery, MySQL, Oracle, Spring Boot, Spring MVC Framework, RESTful and Soap Webservice, Hibernate, Struts.

## **Education**

### **CHENNAI MATHEMATICAL INSTITUTE, CHENNAI — 2019-2021 (Expected)**

Master of Science, Data Science

**Major Courses:** Distributed Systems, Machine Learning, Deep Learning, Regression and Classification, Analysis of Algorithms, Probability and Statistics, Time series Analysis, Theory of Databases.

### **NETAJI SUBHAS INSTITUTE OF TECHNOLOGY, UNIVERSITY OF DELHI — 2011-2015**

Bachelor of Engineering, Instrumentation and Control Engineering. CGPA – 6.9

### **MITHILA PUBLIC SCHOOL, ARARIA — 1997-2010**

Senior Secondary School, Mathematics. Aggregate - 78%

Secondary School. Aggregate – 84.4%

## **Publication and Research**

### **Congestion Control in Opportunistic Networks— AUG 2016**

Centrality based congestion-controlled routing protocol for social opportunistic networks.

**Published in:** IEEE India International Conference on Information Processing (IICIP) 2016

<https://ieeexplore.ieee.org/document/7975388> .