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Summary

A Senior Software Developer and a Team Lead with 13 Years of experience into IOT (Niagara), Software design, development, testing and Analytics. Well versed in Java, Data Analytics, Data Pre-Processing & Data Science, Javascript and Javascript frameworks (React, Promise, D3, C3, Jasmine etc.…). An aspiring data scientist with interest in the areas of Machine and Deep Learning.

SKILLS

- **Technical skills:** Java 8 (Esp. Concurrency, Streams, Lambda and Future), Javascript (Promise, D3, C3, OOJS, ReactJS-Basic) and Python.
- **Certifications:**
  - Niagara certified developer from Tridium Inc.
  - Scrum master certification from Scrum Alliance
- **Data science skills:**
  - **Machine Learning:** PCA, Clustering (Hierarchical and KNN), Decision trees and Random Forest, Text analytics, Ensembling, Linear and Logistic regression, Linear discriminant analysis, Time series forecasting and Artificial Neural Networks.
  - **Statistical Methods:** ANOVA, Hypothesis testing and Confidence Intervals, Dimension Reduction, T Test, Chi Square Test.
  - **Tools:** Tableau, KNIME, Apache Spark and Hadoop.
  - **Programming:** Python and PLSQL

EXPERIENCE

Honeywell, Bangalore – *Team Lead*

May 2015 - PRESENT

- **Niagara Forecast Engine**
  - Designed and developed the product grounds up using Machine and Deep Learning methodologies.
  - Implemented Machine learning algorithms for Supervised and Unsupervised learning, Clustering, Timeseries forecasting and Intelligence reports using Tableau.
  - Data from IOT devices drive this product and What-If analysis from user will be the driver of Forecast Engine.

- **Niagara Analytics Framework**
  - Involved in the design and development of EDA of IOT data, it provides user with Honeywell Energy Domain related information.
  - Involved in the design and development of Data-Pre-Processing phase of Data Analytics, used KNN algorithm and Linear Regression to handle missing data for discrete and Continuous data.
  - Involved in the design and development of Data Preparation phase of Data Analytics, used Outlier Identification Algorithm (Boxplot, IQR and Z-Score) for numeric and ordinal data (Central Tendency).
  - Designed and developed UI and Report framework using Javascript (C3, D3) and Java to help users get more information from the Analytics performed on the IOT data.
  - As a POC worked on integration of R framework in the IOT-Niagara Platform, it will enable users to run the R code and work on data without stepping out of framework itself.
  - Software development, Technical Product Ownership, Lead the team and be the Scrum master are one of my duties in this project.
- **Security and Access Control**
  - Designed and developed HTML5 application for the legacy Webstart driven UI interface of the Security Access Appliance.
  - Designed and developed the UI video streaming frameworks of Axis and Milestone cameras and provided IOT implementation in the framework.
  - Pivotal in finalizing the third-party JS frameworks to integrate with Appliance.

GE Healthcare, Bangalore - *Senior Design Engineer*
November 2012 – May 2015

- **Enabling security for services, deployed over Karaf**
  - Designed and developed Security-Layer that enables the SAML token issue, validation and renewal process between an OSGI service, and an HTML5 user interface deployed over Play Server.
- **Collaboration in Radiology-Information-Systems (RIS)**
  - Designed and developed the JavaScript piece of this assignment. In brief, GE is in market with RIS systems, for next generation imaging we have decided to Collaborate the radiologists that sit at different places. Technology that we chose for Collaboration is XMPP using Strophe.
- **Screen-Share between RIS systems**
  - establish screen share ability between two different RIS systems
- **Instant messaging and presence**
  - Designed and developed JavaScript code to establish Instant-Messaging and Presence services over Cisco Unified Presence Server using jabberwerx.js.

ModelN, Hyderabad – *Product Support Engineer*
February 2012 – November 2012

- Responsible to provide technical and functional support to the customers using ModelN product. Currently I handle Abbott-ADD and actively participate in resolving their issues. Daily I engage with customer through mail/call to discuss the issue complexity and resolution.

GE Healthcare (Medplexus), Hyderabad - *Design Engineer*

January 2011 – February 2012

- Designed and developed an interface that will enable the use of a patient's Medical Data across the globe. I have developed a central interface that pulls the required data from POMS application and loads it to a specific configured location. By doing that, data at one location can be easily set up at any other configured locations and physicians will have ease of access

Tata Consultancy Services, Hyderabad - *Design Engineer*

February 2008 – January 2011

- Designed and developed applications for Belgium Retail Giant Colruyt and Telcom Major Ericsson.

PROJECTS

- **Forecasting Wine Sales for ABC Estate Wines company using TimeSeries Forecasting**

  - Analyzed historical monthly sales data of a company. Created multiple forecast models for two different products of a particular Wine Estate and recommended the optimum forecasting model to predict monthly sales for the next 12 months along with appropriate lower and upper confidence limits.

- **Election Exit Poll Prediction and U.S.A Presidential Speech Analysis using Machine Learning**

  - This project is based on 2 case-studies: Vote Prediction and Text Analysis. The first project is to predict which party a citizen is going to vote for on the basis of their age and according to the answers given by the citizens to the questions asked in a survey conducted. The second project is based on the analysis of the inaugural U.S.A. Presidential speeches. One has to draw inferences based on the analysis done on these speeches.

- **Bank Customer Segmentation and Insurance Claim Prediction**

  - The project involved drawing inferences from 2 case studies, namely - Bank Marketing & Insurance. The concepts of Clustering, CART, Random Forest, Artificial Neural Network are used to draw inferences from these case studies. Various performance metrics have been used to validate the performance of predictions on Test & Train sets.

- **Gems & Holiday Package Prediction**

  - This project is based on 2 cases studies: Gems Price Prediction and Holiday Package prediction. In the first case study, concepts of linear regression are tested and it is expected from the learner to predict the price of gems based on multiple variables to help company maximize profits. In the second case, concepts of logistic regression and linear discriminant analysis are tested. One has to predict if the customer will purchase the holiday package to target the relevant customer base.

- **Salary Analysis using ANOVA and Principal Component Analysis on College Admissions Data**

  - The **project** involved drawing inferences from 2 case studies, namely - Salary Analysis, College Admissions Data. The concepts of Exploratory Data Analysis, Analysis of Variance, and Principal Component Analysis are used to draw inferences from these case studies.
  - **Skills and Tools:** ANOVA, EDA, PCA

- **Statistical & Probabilistic Analysis of Store Sales, University Survey, & Manufacturing data**

  - The project involved drawing inferences from 3 case studies, namely - Wholesale Customer Data (Store Sales), University Survey Data & Manufacturing Shingles Data. The concepts of various measures of Descriptive Statistics, Probability and Probability Distributions and various measures of Estimation & Hypothesis Testing are used to analyze these case studies
  - **Skills and Tools:** Descriptive Statistics, Probability & Probability Distributions, Estimation, Hypothesis Testing

- **Uber Drive**
  - The project is based on the trips made by Uber drivers. Different aspects of the trip are analyzed by using different functions in Python.
  - **Skills and Tools:** Python Functions and Data Interpretation

CERTIFICATIONS or AWARDS

- Certified Scrum Master by Scrum Alliance.
- Niagara Certified TCP and Developer.

EDUCATION

Texas McCombs School of Business & Great Lakes University - *Post Graduate Program for Data Science and Business Analytics (PGPDSBA)*

NIMRA Engineering College -JNTUH, Vijayawada - *B. Tech (C.S.E)*