PraveenKumar Vengatraman

Data Scientist

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Chennai, India

6 years of IT experience in the Data Analysis, Design, Development ,Machine learning, Testing and Implementation of business application systems for leading account - JP Morgan Chase, American Express and CIGNA health care.

WORK EXPERIENCE

Associate - Data Modeler
Cognizant Technology solutions
02/2013 – 12/2017

Machine Learning Engineer
Accenture
12/2017 – Present *Chennai*

PROJECTS

Predictive modelling of HealthCare Cost and Insurance Claim | Python

- ML Engineer
- Worked on a cross functional setup with a team of data engineers and senior business planners, developed analytical frameworks to predict health care costs of individual patients given their prior medical (and cost) history.
- Key Solutions include:
- Built regression models to predict health care cost determined future from prior costs,demographics and diagnosis, to allow more health insurance rate setting. And verified results through ROC/AUC for classification problems in a proper and systematic manner.
- Applied feature engineering/PCA analysis on discussion with SME's and data transformation to aggregate over multiple lines.
- Applied statistical methods to analyse the accuracy of the prediction and to compare the performance of the models.

VLS to MSP Conversion - JPMC | ETL Developer (05/2013 – 11/2015)

- Informatica/Teradata Developer
- This project involves successful implementation of new loan originations platform/system for Chase Mortgage Banking. The new platform will be a full replacement of current systems and will be implemented in multiple phases.JPMC has engaged with Quicken Loans (QL) to license and business processes which has a much higher efficiency factor (roughly measured by loans closed per FTE) than JPMC.

EDUCATION

M.S.Software Engg
VIT University, Vellore
08/2007 – 06/2012

SKILLS

Informatica | Teradata | Statistics and Data | Python | Numpy | Pandas | ERwin | Machine Learning | Deep Learning | Supervised Learning | Predictive Modeling | AI | Text Analytics

ACHIEVEMENTS

Bright Award in 2015 @ Cognizant

Rated Exceed all Expectations in 2017 @ Cognizant

GITHUB

https://github.com/PraveenVPK/

ORGANIZATIONS

Accenture (12/2017 – Present)
ML Engineer

Cognizant Technology Solutions (02/2013 – 12/2017)
Associate

LANGUAGES

English
Tamil

INTERESTS

Games | Articles | Music

Hackathons:

Black Friday Sale

A retail company wants to understand the customer purchase behavior (specifically, purchase amount) against various products of different categories. They have shared purchase summary of various customers for selected high volume products from last month.

I have built a model to predict the purchase amount of customer against various products which will help them to create personalized offer for customers against different products.

Kaggle Competitions

Kaggle MNIST - The Kaggle MNIST competition is a quite standard benchmark for all computer vision models. MNIST is a dataset of handwritten digits, and the overall goal is to have the model classify each image as a digit from 0-9. For this competition, I used a convolutional neural network written in Keras. The model gets an accuracy of 98.63%.

Kaggle Titanic - The Kaggle Titanic competition revolved around taking in a dataset of all the passengers in the Titanic, and then predicting whether or not they survived. The features in the dataset included room location, age, gender, etc. For this competition, I used a variety of different supervised learning approaches (SVMs, KNNs, Decision Trees, Neural Networks), but ultimately found that a KNN model (where K = 17) got the best accuracy of 78.95%. I used Numpy and Sklearn to help preprocess the data and create the models.

Car Price Prediction - The aim of this work is to get familiarized with a Data Science process by building & deploying a Machine Learning Model that can predict a car price based on its features, by trying 4 regression models and choosing the one with the highest R^2 score and the lowest Root Mean Squared Error.