Vishva Shah

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EDUCATION

University of Illinois at Chicago (STEM University)

Expected Dec 20

MS in Business Analytics - Major: Data Science, Major GPA: 4.0

GPA: 3.87

Courses: Deep learning, Data mining, Database management, Advanced statistics, Machine learning, Time Series

Institute and Faculty of Actuaries (UK)

Apr 14 - Apr 18

Professional degree in Actuarial Science: 9 exams

Major Courses: Probability distributions, Statistical and forecasting models, Financial mathematics

University of Mumbai (India)

Apr 13 – Apr 16

Bachelor's in Economics & Commerce

University of Mumbai (India)

Apr 18 – Sept 19

Master's in Economics & Commerce

SKILLS

Technical Python, R, AWS, Pyspark, Tableau, VBA, MySQL, HTML, Git, Microsoft Office

Machine Learning Data Mining, Reinforcement learning, Cluster analysis, Deep Neural Networks, GANs, NLP, Ensemble

methods (Random forest, gradient boosting), SVM, KNN, Algorithms, Data Structures

Statistics Hypothesis testing, Naive Bayes, Regression, Markov-chain, Confidence-intervals, Time Series analysis

Certifications Udacity AWS Machine Learning, June 2020

ACADEMIC PROJECTS

Image Classification on FER 2013 [GitHub repo]

Spring 2020

Built an image classifying model with Pytorch, Scikit-Learn, NumPy, SciPy, Pandas, Pickle, MLlib, OpenCV

- Critiqued models for transfer learning like Alexnet, VGG16, GoogleNet, and Resnet. The fusion model combining VGG16
 and Resnet50 resulted in highest accuracy of ~85%
- Data augmentation performed by transforming images by rotating, mirroring, cropping, and padding which increased training data by ~35% and hence reduced overfitting
- Enhanced the accuracy to ~89% after appropriate tuning of hyperparameters and error analysis with confusion matrix

Manipal Hospital Harvard business review Case study [GitHub repo]

Fall 2019

Developed supervised machine learning models for NPS score by ggplot2, rpart, randomforest, GBM, ROCR, Caret

- Customized data pre-processing algorithms for removal of redundant columns and imputation of missing values for 40K rows
- Designed stacked ensemble models architecture with Random forest and Gradient boosting, after feature extraction using PCA and SMOTE to balance data
- Evaluated model by tuning parameters using K-fold validation, confusion matrix, ROC curve and final test accuracy was approximated to be ~88.5%

WORK EXPERIENCE

University of Illinois at Chicago | USA

May 2020 – Aug 2020

Research Assistant

- Parallelized extraction using map-reduce algorithm in python and speed up the process of modelling and training by ~65%
- Conducted data pre-processing for NLP with Spacy, NLTK for tokenization, chunking, POS tags and removal of stop words
- Streamlined a bi-directional LSTM to experiment with dataset and evaluated by F1-score which resulted in ~50% better accuracy than previously assessed models

ICICI Prudential Life Insurance Company Ltd. | India

Jan 2018 - July 2018

Actuarial Data Analyst - Manager II

- Utilized data mining techniques to develop statistical models after EDA resulting in ~85% accuracy thereby enhancing sales
- Optimized the visual data with creation of real-time dashboards via tableau that enhanced and automated overall sales team performance by ~25% and \$2MM of incremental revenue
- Led the team for the annual risk note overseeing all aspects of statistical results and info graphics like histograms, heat-map

Reliance Nippon Life Insurance Company Ltd. | India

Nov 2016 - Jan 2018

Actuarial Data Analytics Consultant

- Rendered assistance in business development projects by developing mathematical models for forecasting uncertainty and identify patterns in the data
- Improvised on a healthcare product pricing model independently after feature extraction resulting in an increase of ~35% accuracy compared to the previous model
- Automated the procedure of extracting massive amounts of results using VBA and speed up the process by ~50%

EXTRA CURRICULUM

_	Business Analytics Organization	Corporate Relations Manager, organizing events for incoming students	Present
_	Volunteer of National Service Scheme	Organized Blood Donation Drives, Head of the golden jubilee fest	2013 - 2016
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Core Member of Rotaract Club Visiting Orphanages, cleanliness projects, plantation drive 2011 - 2012