Vishva Shah

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Education

University of Illinois at Chicago (Stem University) Expected Dec 20
- Master's of Science in Business Analytics, Major - Machine Learning GPA: 3.87
- Courses: Deep Learning, Data Mining, Database Management, Advanced Statistics

Institute and Faculty of Actuaries (UK) Apr 2014–Apr 2018
- Actuarial Science: 9 papers cleared
- Major Courses: Probability distributions, Statistical and forecasting Models

University of Mumbai Apr 2013–Nov 2019
- Master and Bachelor in Commerce and Economics 85.5%

Skills

Coding	Python, R, AWS, Pyspark, Tableau, VBA, MySQL, HTML, Microsoft Office
Machine Learning	Data Mining, Reinforcement learning, Cluster analysis, Deep Neural Networks, GANs, NLP, Ensemble methods (Random forest, gradient boosting), SVM, KNN
Statistics	Hypothesis testing, Naive Bayes, Regression, Markov-chain monte-carlo simulations
Certifications	Udacity AWS Machine Learning

Academic Projects

Image Classification on FER 2013 [GitHub Repo] Spring 2020

Built an image classifying model using Pytorch, Scikit-Learn, NumPy, SciPy, Pandas, Pickle, MLlib, OpenCV
- Experimented models for transfer learning like Alexnet, VGG16, GoogleNet, and Resnet. The fusion model using 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 and hence reduced overfitting
- Enhanced the accuracy to ∼89% after appropriate tuning of hyper-parameters and error analysis using confusion matrix

Manipal Hospital Harvard business review Case study [GitHub Repo] Fall 2019

Developed supervised machine learning models for NPS score using ggplot2, rpart, randomforest, GBM, ROCR, Caret
- Wrote Data pre-processing algorithms for removal of redundant columns and imputation of missing values
- Designed stacked ensemble models architecture using 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 May 2020 - Aug 2020

Summer Research Project Assistant
- Parallelized extraction using map-reduce algorithm and speed up the process by ∼65%
- Conducted data pre-processing for NLP using Spacy, NLTK for tokenization, chunking, POS tags and removal of stopwords
- Designed a bi-directional LSTM to experiment with dataset and evaluated using F1-score which resulted in ∼50% better accuracy than previously designed models

ICICI Prudential Life Insurance Company Ltd. Jan 2018 - July 2018

Actuarial Data Analyst – Manager II
- Utilized data mining techniques to develop statistical models and monte-carlo simulations after EDA and statistical tests resulting in ∼85% accuracy thereby enhancing sales
- Optimized the visual data with creation of real-time dashboards using tableau that enhanced and automated overall sales team performance
- Led the team for the annual risk note including statistical results and info graphics like histograms, heat-map in R

Reliance Nippon Life Insurance Company Ltd. Nov 2016 - Jan 2018

Actuarial Data Analytics Consultant
- Rendered assistance in business development projects by developing mathematical models for forecasting uncertainty
- Improvised on a healthcare product pricing model independently after feature extraction resulting in an increase of ∼35% compared to the previous model
- Automated the procedure of extracting the results using VBA and speed up the process by ∼50%

Extra Curriculum

Volunteer of National Service Scheme Organized Blood Donation Drives. Head of the golden jubilee fest
Part of the Rotaract Club of Narsee Monjee College Visiting Orphanages, cleanliness projects, amongst others