

Tongxin (Tina) Wang

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Self-motivated and detail-oriented adventure-seeker with a strong interest in data science. Strong analytic skills proven through course projects and professional internships.

EDUCATION

Brown University, *MSc in Data Science* Providence, RI | Aug 2019 - Dec 2020 (Expected)

Studies include (GPA: 3.7): Classical Machine Learning Methods, Statistics, Deep Learning, Data Engineering

University of Southern California, *BSc in Applied Mathematics* Los Angeles, CA | Aug 2016 - Aug 2018

Studies include (GPA: 3.7): Linear Algebra, Probability, Mathematics in Machine Learning, Statistics, Java, Python

TECHNICAL SKILLS

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- Programming Language: SQL, Python, R, Julia, Java
 - Machine Learning: pandas, scikit-learn, TensorFlow, Keras, PyTorch
 - Data Visualization: matplotlib, plotly, seaborn, ggplot
 - Big Data: statistical analysis, data mining and modeling, Apache Spark, AWS

PROFESSIONAL EXPERIENCE

ShengxinChuangzhan Construction Engineering Co., Ltd, Tianjin, China | May 2017-Aug 2017

Business Analytics

- Accomplished data entry of the material cost independently and evaluated material utilization rate data using Excel
- Identified a cost anomaly and assisted managers to investigate the case to avoid further losses worthy \$10,000
- Analyzed budget and cost balance using visualizations and created weekly reports to help better assess and improve company operations

PROJECT EXPERIENCE

YouTube Trending Videos Analysis Providence, RI | Aug 2019 - Dec 2019

This project uses machine learning and visualization techniques to analyze and predict YouTube videos trending days.

- Performed EDA on trending videos dataset and analyzed key metrics with data visualization
- Analyzed the like, view, comment ratios of videos and found these features have major impacts on total trending days
- Built a machine learning pipeline to examine and compare multiple supervised machine learning models, and used fine-tuning parameters with grid search to promote the accuracy of trending days prediction

Bengali.ai Handwritten Grapheme Classification (bit.ly/codeblenders) Providence, RI | Jan 2020 - Present

This Kaggle competition improves Bengali handwritten grapheme recognition with deep learning techniques.

- Performed exploratory data analysis (EDA) on the training data using feature selection and visualization tools
- Built and enhanced the CNN model by fine-tuning parameters; Improved Bengali recognition accuracy to 95%
- Leveraged Tensorboard to visualize the model training process and evaluated the performance of the model
- Created a project website to document the project progress and updated web content weekly

Stock Price Analysis Providence, RI | Mar 2020 - Present

This project aims at understanding stock price behavior for 500 tickers in 2016 and creating a portfolio

- Cleaned given dataset and separated more than 80,000 data entries to 10 files to support future analysis
- Performed EDA and created interactive candlestick graphs for interested stocks
- Engineered Beta score, annual return and sharpe ratio for each ticker and updated feature matrix
- Applied K-means to cluster tickers for portfolio generation purpose and found an optimal number of cluster