

# WEIXING(Travis) LI

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## EDUCATION:

**USA: William and Mary, Raymond A. Mason School of Business** Master of Science, Business Analytics 2018.8 – 2019.5

- GPA:3.94/4; Top 1 in machine learning course; Awarded school "Community Contributor".
- Courses included: Big Data, Machine Learning, AI, Optimization, Data Visualization

**Graduate Certificate in Data Mining and Applications, University of Stanford** ongoing

## ACHIEVEMENTS:

**Capstone Project: Ferguson Enterprise (Multi-Channel Attribution Model, Attention RNN):** USA: 2019.4 – 2019.5

- Processed 550,000 customer data about their interactions with the website and built model to predict customer conversion (purchase) rate and attribute values to each step along customer digital journey.
- Achieved 96% accuracy and 0.99 AUC score on predicting customer conversion by creating a state-of-the art Multi-Channel Attribution Model; and assigned credits to different customer channels using the trained model.
- The model merged Attention + LSTM (deal with sequential channel data) and Embedding FNN (process consumer behavioral and demographic data). The revised softmax function took time decay effects into consideration.
- The model can be easily transferred into Wide & Deep product recommendation system.

**Project highlights – W&M Mason Business School**

USA: 2018.9 – 2019.5

**Kaggle: Quora Insincere Questions Classification (NLP, machine learning, deep learning):**

- Developed a merged Naïve-Bayes Logistic Regression model to classify 1 million + questions on Quora.com as sincere or insincere and achieve a similar classification performance with 97% accuracy, comparing Keras-based LSTM model that employed transfer learning with pre-embeddings GloVe.
- Provided an action plan: set up alarm point based on the trade-off between type1 and type2 error: when <0.1 – no action; when >0.1, <0.2, human check; when >0.2, reject;
- Presented to professors and classmates with enriched visualization graphs (like word-cloud).
- Authored an article distributed by curator on Medium.com, which illustrated the text mining and training;

**Hospital Readmission Analysis (ETL, SQL, Spark):**

- Analyzed 120,000 healthcare claim data from two cites in America and built a random forest model to forecast whether a patient will be readmitted or not.
- Reduced time needed to query data by 50% through fostering dimensional modeling in MySQL database, extracting, pre-processing and loading the data via SQL query.
- Expedited the efficiency on visualization of variables relating to readmission in Tableau by pre-selecting more important variables derived from random forest built-in function.

**Work Experience: Communication Strategy Manager – Blue Focus International Group** BEIJING: 2016.11 – 2017.8

- Headed a project that attained 700,000 followers and reduced the average cost of acquiring fans by 80% through applying new advertising strategy for China Mobile sub-brand - MIGU Facebook Page.
- Developed a regression model with R programming that mined the historical data, raising the user engagement rate by 120% with instructions indicated by the model.
- Conducted A/B testing on the variants like different posting time and hashtag, etc., supporting the implementing of the new strategy.

## CERTIFICATIONS:

- coursera.com certificates: Deep Learning Specialization (5 courses, taught by Andrew Ng)
- UCSC Silicon Valley extension: Data analytics and Database Management

## TECHNICAL SKILLS:

- Languages:** Python, R, SQL, Scala
- Framework:** Pandas, Numpy, Scikit-learn, NLTK, Spacy, Matplotlib, Seaborn, Tensorflow, Keras, Hadoop, Spark, Gurobi,
- Statistical modeling:** logistics regression discriminant analysis, Regression, Bayesian model, bagging, Random Forest, Boosting, XGboost, SVM, Neural Network

## ADDITIONAL INFORMATION:

- Founder and Organizer of School AI Workshop in William & Mary
- A blogger on Medium.com; An article about Natural Language Processing was distributed by the Curator on machine learning page. (<https://medium.com/natural-language-processing-machine-learning/nlp-for-beginners-how-simple-machine-learning-model-compete-with-the-complex-neural-network-on-b9f7f93c79e6>)