Yiting (Elle) Tsai

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Technical Competency

BI Analytics Tools and Database: SQL, Python, R, Tableau, AWS, RapidMiner, STATA, Excel

Statistical & Machine Learning Model: ETL Process, Logistic Regression, Support Vector Machine, Random Forest, Gradient

Boosting, Customer Analysis, A/B Testing, Natural Language Processing, Neural Networks, Image Recognition

Education

University of Virginia

Charlottesville, VA, USA

Master of Data Science, Current GPA: 3.84

May 2020

Relevant Coursework: Data Mining, Machine Learning, Text Mining, Neural Networks, Data Visualization, Business Analytics, Bayesian Machine Learning

National Sun Yat-sen University

Kaohsiung, Taiwan

Bachelor of Science in Mechanical and Electro-Mechanical Engineering

June 2018

Selected Projects

Markel Corporation

Dec 2019 - Apr 2020

- Predicted customer churn rate for General Liability Insurance for Markel Corporation to alert of possible customer churn 90 days in advance of contract expiration date using Machine Learning and Neural Networks
- Enhanced accuracy rate by 10% to analyze customer churn rate with Machine Learning models including Random Forest, XGBoosting, and Automatic Machine Learning on 6M+ company and governmental data
- Implemented Survival Analysis to understand customer life time and gained data-driven findings on key features

COVID-19 News Sentiment Analysis

Apr 2020 - May 2020

• Conduct data ETL process to collected and wrangled coronavirus news articles from CNN, US News, Fox to analysis U.S. social media sentiment variation with confirmed number relationship from January to March

Professional Experience

McIntire School of Commerce, University of Virginia

Charlottesville, VA

Research Assistant

Aug 2019 - Present

- Built data pipeline to extract and integrate data utilizing SQL and Python to scraped 5GB+ data from open source API
- Conduct Casual Impact Analysis using Difference-in-Difference econometric and Time Series Analysis to explore and visualize influence of advanced technology package on company's innovation by Tableau dashboard and STATA

McIntire School of Commerce, University of Virginia

Charlottesville, VA

Teaching Assistant

- Jan 2020 May 2020
- Created educational curriculum materials enable undergraduate students to learn Business Analytics from scratch to be able to apply and understand algorithms behind Machine Learning models
- Supervised classes of 40-50 with weekly assignments and mastered knowledge of Business Analytics and Machine Learning, as well as interpersonal skills, including expressing insight to non-tech people

YPCloud Inc. Taipei, Taiwan

Software Engineer Intern

Dec 2018 - Feb 2019

- Joined a cup rental system project to promote environmental protection that enabled users to rent and return cups in different places and achieved over 7K+ users in Taiwan in three months
- Built a data pipeline in Node-RED to connect the usage database and email server to trigger automated reminders of late return which helped reduce overdue return by 10%

Leedarson Lighting Co., Ltd.

Xiamen, China

Marketing Intern

July 2016 - Aug 2016

- Conducted Competitive Analysis and visualization for 50+ products across brands by Excel for managerial decision
- Collected requirements from VIP clients for product design and communicate with engineers to deploy production plan