

DIWEI “DAVID” ZHU

New York, New York | 917-864-6724 | dz1397@nyu.edu

EDUCATION

New York University, Tandon School of Engineering, Brooklyn, New York **Sep 2019 - May 2021(Expected)**
Master of Science, Industrial Engineering, GPA:3.87/4.00
Relevant Coursework: Machine Learning, Programming for BI & Analytics, Business Analytics

Northeastern University, Shenyang, China **Sep 2015 - Jul 2019**
Bachelor of Business Administration, Industrial Engineering, GPA:3.50
Relevant Coursework: Quality Control & Reliability, System Engineering, Production Planning & Control

TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, R, Java(basic), C++ (basic)
- **Certificate:** Tableau Desktop Specialist
- **Skills:** Programming, Consulting, Software Testing, Project Management, Machine Learning
- **Other Tools:** Git, MySQL, Jupyter Notebook, Sklearn, Pandas, NumPy, AWS, R studio, MATLAB

PROFESSIONAL EXPERIENCE

SAP Implementation Project Intern, Capgemini Consulting, Guangzhou, China **Feb 2019 – May 2019**

- Established testing procedures for a web application to provide easy access to the ERP system on WeChat
- Solved 90% of bug cases with the software, documenting every case on the error report for follow-ups
- Generated testing environment datasets using Navicat software to manipulate MySQL database

Industrial Engineer Intern, Avic Shenyang Aircraft Co., Ltd., Shenyang, China **Jul 2018 – Aug 2018**

- Devised a research paper focus on high temperature and noise pollution in the factory
- Developed 2 solutions for these problems, including using electric power, air conditioners
- Monitored and tracked factory environment on temperature and noise using thermometer and decibel meter

PROJECT EXPERIENCE

YouTube trending video analysis (R) **NYU - Dec 2020**

- Created an “engagement score” metric to evaluate YouTube video and channel’s engagement with the audience
- Identified the key elements of trending video and provided suggestions on channel growth for personal Youtubers
- Aggregated datasets on video, channel, category with statistic features and visualized texts using word cloud

Prospective Student Persona Modelling (R) **NYU - Oct 2020**

- Derived 5 distinct personas of potential students for Marketing purpose with historical database on River University
- Enriched dataset by combining county-level income data and filling missing data by criteria
- Developed pipelining function and conducted grid search to find compelling subgroup with feature combinations

Home credit default risk project (R) **NYU - Oct 2020**

- Predicted the customers’ probability of loan repayment on a joint dataset with loan history and credit card usage
- Compared models’ performance and chose gradient boosting tree because of its high accuracy of 73%
- Balanced dataset by oversampling and figured the best parameters for the model by performing grid search
- Visualized the feature engineering process using ggplot2 and demonstrated the result and analysis to our audience

The COVID-19 effect (Python) **NYU - May 2020**

- Collaborated with a group of 5 to collect data and analyze the relationship between COVID and GDP growth.
- Developed a linear regression model to predict the economic effects based on the education and economics
- Performed data clustering using K Means and preprocessed the data by handling missing values and joining data
- Visualized the results and clusters using Matplotlib and presented the results to the class of 30

Cloth retail analysis (Tableau) **Jun 2020**

- Rectified unnecessary data using data interpreter to map it into quantified pivot tables
- Applied trend lines to predict the future values using Time based Linear Regression
- Demonstrated the best locations for cloth sales in Australia using the “story” feature