Binqian Zeng

M.S in Data Science - Courant Institute of Mathematical Sciences - NYU
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SKILLS

Python, R, SQL, Microsoft Excel, Crystal Ball, Spark, Hadoop Matlab, Fortran, LaTex, Data Analysis, Statistics

EDUCATION

NEW YORK UNIVERSITY: First-year Master of Data Science — *New York, NY*, *Sep 2016 – May 2018*
- Machine Learning, Programming for Data Science, Statistical and mathematical methods, Decision Model and Analytics, Big Data, Text as Data

Sun Yat-sen University: Major in Theoretical and Applied Mechanics — *Guangzhou, China*, *Sep 2012 – June 2016*
- Relevant course: Calculus, Linear Algebra, Probability Theory and Mathematical Statistics, Ordinary Differential Equations, Computational Methods, Fluid Mechanics, Methods of Mathematical Physicals, Programming for engineering
- SYSU Third-class Scholarship (thrice)

WORK EXPERIENCE

China Guangfa Bank: Data Analyst on customer behavior, Intern — *Guangzhou, China*, *Dec2015 – Feb 2016*
- Organized and classified customer information using decision tree
- Analyzed propensity of customers, and presented findings to superior using Excel

Uber Technologies Inc, Guangzhou Branch: Operation Assistant, Intern — *Guangzhou, China*, *Sept – Dec 2015*
- Used data from customer requests and Uber trips to maintain the balance between cars and demands based on linear programming
- Optimized operation process by changing drivers' recommendation award policy

Guangdong Research Institute of Water Resources and Hydropower: Research Assistant — *Guangzhou, China*, *Aug – Sept 2015*
- Partook in "Research on Mix Proportion Test of Roller Compacted Concrete for Dam", researched into the concrete permeability resistance, compressive properties and air content
- Analyzed experimental data, carried out data processing, including handling missing and error data and scaling

RESEARCH EXPERIENCE

Spam Email Detection System: NYU Term Project — *New York, U.S*, *Oct 2016 – Dec 2016*
- Conducted Data cleaning and feature selection using python modules including Numpy and Pandas.
- Processed raw data of email text into word tokens based on Count Vectorizer, TF-IDF in the ScikitLearn module.
- Built the models with Naïve Bayes, Decision Tree, Logistic Regression and Random Forest Visualized the evaluation result.

Particle Tracking Algorithm for Measurement of Zeta Potential on Particle Surface: SYSU Students' Innovation Training Program, Team Leader — *Guangzhou, China*, *Jun 2014 – May 2015*
- Wrote a program to track particles in accordance with high-order compact difference scheme and Obtained simple and precise measurement results by using convolution formulas and diffusion equations
- Realized denoising and image enhancement using Gaussian filter
- Matched particles with its movement tracks through establishing cost functions

Research on Structural Damage's Identification Based on Bee Colony Algorithm: SYSU Students' Innovation Training Program, Team Leader, Team Member — *Guangzhou, China*, *Jan 2015 – Aug 2015*
- Wrote a program for artificial bee colony algorithm using Matlab, optimized it to achieve more efficient and precise locations
- Used finite element modeling to study structural damage, analyzed the model's natural frequency, modal and frequency-response function
- Established objective function according to natural frequency-response function
- Optimized the objective function through refined bee colony algorithm, located and quantitatively identified structural damage