Sammy Sheng

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SUMMARY

Enthusiastic programmer with engineering background and practical data-related project experience. Demonstrated ability to develop new skills, highly organized and results-driven team leader with proven data manipulation ability, able to communicate complex concepts to diverse audiences.

SKILLS

Programming Tool: Java (OOP, Database), Python (Sklearn, Pandas, Numpy), R, SQL

Machine Learning: Bayes' theorem, GLM, Tree-based Methods (XGBoost, Decision Tree, Random Forest), SVM, Principle Component Analysis, Clustering

Big data tool: Pyspark, MapReduce, AWS (S3, EC2, SageMaker, CloudWatch)

Visualization: Tableau, Python (Seaborn, Matplotlib)

EDUCATION

William and Mary, Raymond A. Mason School of Business   May 2020
Master of Business Analytics   GPA:3.95

Wuhan University   Dec 2018

Energy Chemical Engineering   GPA:3.71

Hongkong Polytechnic University   Aug 2017 – Jan 2018

Economics and Applied Chemistry   GPA:3.82

EXPERIENCE

WJCC
Capstone Project   April 2020 - May 2020[link]
- Proposed new, more efficient bus routes for 3 tiers of schools of Williamsburg James City County via optimizing the assignment of stops to routes and bus usage, minimized the total traveling miles
- Cleaned and reorganized over 5000 rows of data, transformed the physical addresses of school stops to geographical coordinates and calculated the traveling distances between stops using Google Maps' Distance Matrix API
- Rescheduled stops and routes by coding in Python with Google OR-Tools, involved a top-down, greedy search algorithm that connects the nodes to produce a cheapest route
- Produced an interactive dashboard of routes map in Tableau to indicate every new route of each school

Goaland
Project Analyst   Mar 2019- May 2019[link]
- Automated monitoring in scaling tendency of cooling water in power plants, built on-line analysis system based on Regression and Time Series in R
- Optimized heat exchange efficiency in cooling water system by 14.7%, saved operation cost by 12.9% and equipment renewal cost

Accenture
Strategic analyst   Sep 2018- Dec 2018
- Reduced annual expenses of a Japanese client 20% by strategic positioning analysis
- Provided scientific forecasts on future sales of the company based on market research results

Hankou Bank
Product Intern   June 2018- July 2018
- Analyzed, visualized over 5000 rows of bonds and interest data weekly in Wind
- Compiled, wrote reviews and prospectus on a $80,000,000 newly issued bond. Provided scientific forecasts on future sales of the company based on market research results

PROJECTS

Conversion Rate prediction using AWS SageMaker   Mar 2020- April 2020[link]
- Managed, accessed over 300,000 records in S3 bucket, built machine learning models in notebook instance using AWS SageMaker
- Trained and tested the models by customizing a 6-core, Linux-based machine in AWS EC2
- Predict user conversion rate for an e-commerce company based on Gradient Boosting classifier framework, produced an overall accuracy of 98.6%

Burger Store Charging System   July 2020 [link]
- Helped a fictitious company Bills Burgers to manage their process of selling hamburgers
- The application will help Bill to select types of burgers, some of the additional items (additions) to be added to the burgers and pricing, which is developed in Java

"Hydrogen Electrode", First prize (1%) in Energy conservation Competition   Mar 2016- Mar 2017[link]
- Improved battery performance 7.9% by performing regression analysis on SAS to explore relationships between hydrogen electrode structure and technical parameters

ADDITIONAL INFORMATION

Leadership
- Captain, campus Women's Volleyball Team
- "Most valuable Ace Spiker" of Wuhan University Women's Volleyball team
- Tutoring services for Power and Mechanics Department, Wuhan University

Certifications: Beta Gamma Sigma