

Jiale He

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EDUCATION

Weill Cornell Medicine, New York, NY

August/December 2020

Master of Science in Biostatistics and Data Science; Cumulative GPA: 3.94/4.00

University of Illinois at Urbana-Champaign, Champaign, IL

May 2019

Bachelor of Science in *Crop Sciences*; Cumulative GPA: 3.59/4.00

SKILLS

- Computer skills: R, Python, SQL, SAS
- Lab skills: DNA extraction and purification, Agarose Gel Electrophoresis, Nucleotide Blast etc.

WORK EXPERIENCE

Data Analyst Intern, CMST Intelligence Logistics Technology, Nanjing, China

June 2019-August 2019

- Used SQL to perform data cleaning and analyze over 500000 user data from the company's databases, generated multiple reports with SQL and Excel
- Communicated and finished technical demands from other Departments, such as cargo transportation report and customer transaction detail report.
- Implemented analysis of CMST App user-data and order-details to support the development of drivers' credit score system
- Lead the analysis of Prepay-Service Risk Estimation with regulations/guidance of People's bank of China
- Implemented analysis of sales datasets with SQL for brand promotion
- Implemented selection of transportation information for R&D department's needs

Undergraduate Researcher, Erik J. Sacks Lab, Urbana, IL

May 2018-June 2019

- Collaborated with Dr. Lindsay V. Clark for the testing and debugging of R package "PolyRAD"
- Analyzed and visualize genomic data generated by next-generation sequencing
- Tested PolyRAD package by comparing the result generated from accurate GoldenGate potato data and dirty data to identify the package's accuracy and precision
- Anticipated to find better ways to estimate genotypes from next-generation DNA sequencing read depth

ACADEMIC PROJECTS

Happy Valley Beef Cut Calculator, WCM, New York, NY

October 2019

Designed a tool with R and ShinyApp to help users explore and visualize the environmental impacts of different cuts of beef. Exhibit the per unit water consumption, CO2 emissions and land usage by different beef cuts with customized UI and novel visualization means.

Unsupervised learning on 2015 Flight delays and cancellations, WCM, New York, NY

December 2019

Utilized PCA and K-means Clustering techniques with Python to find potential possibility to resolve airline delays, and figure out the relationship between state-wise delay patterns and airport quality.

RESEARCH EXPERIENCE

Research Assistant, SXM Lab, Urbana, IL

May 2017-January 2018

Advisor: Assistant Professor Santiago Mideros

- Planted plots of soybeans of different varieties and tested pathogens throughout growth phase of plant
- Inoculated soybeans with brown spot and treated infected soybeans with different schemes
- Studied the influence of brown spot on yield rate according to pathogen distribution and output
- Verified the experimental results in different test fields so as to exclude impact of location
- Operated basic laboratory instruments, such as electrophoresis, autoclave, inoculation etc.