Chenya Zhao

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EDUCATION

Pennsylvania State University
Bachelor of Science in Applied Statistics, GPA: 3.12/4.00   Aug 2016-May 2020
Case Western Reserve University
Master of Science in Biostatistics & Epidemiology, GPA: 4.00/4.00   Expected Dec 2021

Selected Coursework
Statistical Analysis: Statistical Inference, Regression Analysis, Analysis of Variance, Time Series Data Analysis, Stochastic Modeling, Longitudinal Data Analysis, Survival Data Analysis
Study Methodology: Introduction to Epidemiology, Computational Statistics

RESEARCH EXPERIENCE

Southwest University, Department of Psychology   Chongqing, China
Research Assistant, Supervisor: Dr. Yufang Zhao   Jun 2018-Jul 2018
Project: The Processing Advantage of Threatening Facial Social Information in Gaze Cueing
• Participated in study design of a social psychology experiment to test the social threat learning of participants
• Designed and distributed flyers on social media platforms to recruit 52 undergraduate students
• Introduced study protocol and instructed participants to complete the experiment on computers
• Cleaned and organized results using Excel, and produced descriptive statistics for further analysis
• Assisted with the manuscript preparation and presented preliminary results to the research group

RELEVANT COURSEWORK PROJECTS

Case Western Reserve University, Statistical Consulting   Aug-Dec 2020
• Conducted preliminary observational studies and RCTs to assess the feasibility of large-scale studies
• Performed ANOVA and Chi-square test to identify significant factors for aimed outcomes
• Determined the minimum number of participants to achieve adequate power using Sealed Envelope software
• Presented results using data visualizations packages such as ggplot2 in R
• Drafted reports and presented study results to the class

The Pennsylvania State University, Analysis of Variance   Oct 2019-Dec 2020
Project: Analysis of Anti-Anxiety Drug Effectiveness on Memory Priming
• Analyzed a drug test dataset from Kaggle to examine the effectiveness of anti-anxiety drugs on memory priming
• Run two-way ANOVA test to compare patients' ability of memory priming pre- and post-drug administration
• Used Tukey test to compare the effectiveness of three drugs with different dosages for ameliorating anxiety
• Visualized data and results using ggplot2 package in R, and delivered a final presentation to class

The Pennsylvania State University, Introduction to R   Oct 2019-Dec 2020
Project: Analysis of Factors Influencing Suicide Rate in Multiple Countries
• Conducted a case-control study of suicide in relation to demographic information
• Visualized the linear correlation between variables using scatter plot matrix in R
• Performed multiple imputations using mice package to address the issue of missing data
• Carried out multiple linear regression models to identify significant risk factors of high suicide rate across countries
• Visualized the final results using Lattice and ggplot2, and drafted the final report

INTERNSHIP EXPERIENCE

Taiping Life Insurance Co. Ltd., Operational Planning Department   Chongqing, China
Performance and Pricing Analyst Intern   Jun-Aug 2017
• Merged working progress data of over 1,000 employees and evaluated performance using MySQL
• Organized an award ceremony to recognize and award employees with outstanding performance
• Designed an employee incentive application with the IT department to promote productivity
• Conducted market research on both existing insurance products and the latest industrial trends
• Analyzed financial results and product profitability using R to assist financial planning and price forecasting

SKILLS & CERTIFICATES

Statistical Package: R, SAS, Python, MySQL
Productivity: Microsoft Office Suite: Word, Excel, PowerPoint
Language: English (Fluent) and Chinese (Native)
Certificate: CITI-CREC Program certification, SAS Certified Associate-Programming Fundamentals