Pang-Yu Liu

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Education

University of Connecticut CT, U.S.A Dec 2020
Master of Science in Statistics GPA: 3.72/4.3
Relevant Courses: Mathematical Statistics, Linear Statistical Models, Design of Experiments, Nonparametric Methods

National Chengchi University Taipei, Taiwan (R.O.C) Aug 2017
Bachelor of Science in Public Finance GPA: 3.85/4.0
Relevant Courses: Calculus, Advanced Calculus, Linear Algebra, Probability, Mathematical Statistics

WORKING EXPERIENCE

Cincinnati Children's Hospital Medical Center Jan 2021-Present
Data Programmer Cincinnati, U.S.A

- Explore Data Visualization (EDA) with REDCap Projects within a RShiny application
  -Design a user-friendly UI for users to visualize Rare Disease data with statistical graphics interactively.
  -Provide a widely-used tool for creating automated, reproducible, and share-worthy outputs, such as demographics table and statistical plots in Rmarkdown.
- Develop Reporting Tool for Rare Disease database from REDCap within a RShiny application.
  -Provide flexible web-based tool for users to acquire Rare Disease data listings with customized selections.
- Clinical Trial Data Validation Programs.
  -Create validation programs for derived dataset, Tables, Listing and Figure (TLF) for several non-RDCRN/RDCRN project, such as B2B, Rheumatology by using SAS.

Boehringer Ingelheim Sept 2019-Mar 2020
Statistical Programming Internship Ridgefield, U.S.A

- Event Prediction Dashboard.
  -Conducted disease event prediction along with biostatisticians through survival analysis method by using gestate package.
  -Developed a RShiny dashboard to visualize event prediction interactively.
- Clinical Trial Validation Programs.
  -Developed validation programs like Tables, Listing, and Datasets through using SAS programs.

ACADEMIC PROJECTS

Covid-19 Tracking Dashboard Aug 2021
Kaggle Competition
-Interactive approach to visualize Covid-19 Data in US with both Leaflet and Plotly packages.
-Visualize Covid-19 cases and deaths by states or counties in US.
-Provide statistical graphics, such as line plot, bar charts to visualize demographic information by state or county level.

Nonparametric Statistics Term Project Oct 2019
University of Connecticut
-Performed Non-Parametric method-Jonckheere Terpstra analysis of factors increasing environmental temperature in Beijing's PM2.5 using Julia programming.

Applied Statistic Term Project March 2019
University of Connecticut
-Explored related features which had significant impact on Connecticut's economy through multiple linear regression, using SAS to exhibit both statistical results and data visualization, such as map, to help locals to identify affordable and accessible places to live.

Technical Skills

Programming languages: Python, Julia
Statistics and Visualization: R, R-shiny, SAS
Web Technologies: HTML, JavaScript
Miscellaneous: MySQL, Latex