

Pang-Yu Liu

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EDUCATION

University of Connecticut CT, U.S.A

2020

Master of Science in Statistics

GPA: 3.72/4.3

Relevant Courses: Mathematical Statistics, Linear Statistical Models, Design of Experiments, Nonparametric Methods, Applied Statistics

National Chengchi University Taipei, Taiwan (R.O.C)

2017

Bachelor of Science in Public Finance

GPA: 3.85/4.0

Relevant Courses: Calculus, Advanced Calculus, Linear Algebra, Probability, Mathematical Statistics, Regression Analysis

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.
 - Support on creating 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.
 - Conduct disease event prediction along with biostatisticians through survival analysis method by using gestate package.
 - Develop a RShiny dashboard to visualize event prediction interactively.
- Clinical Trial Validation Programs.
 - Support on creating 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 level or county level.
- Github: <https://github.com/liuc3k/Covid-19-Dashboard-in-US>

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

Web Technologies: HTML, JavaScript

Statistics and Visualization: R, R-shiny, SAS

Miscellaneous: MySQL, Latex

CERTIFICATIONS

- SAS Certified Base Programmer for SAS 9
- SAS Certified Advanced Programmer for SAS 9
- SAS Certified Clinical Trials Programmer for SAS 9

Sept 2016
Apr 2019
Dec 2021