Tianran ZHANG

http://creatran.github.io/ (646) 269-6106 tiz4001@med.cornell.edu New York, NY 10044

EDUCATION

Cornell University, New York, NY **Sep 2019 – Present**
M.S. in Data Science & Biostatistics
GPA: 3.99

Fudan University, Shanghai, China **Aug 2015 – Jul 2019**
B.S. in Mathematics (Data Science)
School of Data Science
School of Mathematical Science

WORK EXPERIENCE

Quantitative Investment Department at ZHONG OU AMC | Research Assistant **Jul 2018 – Oct 2018**
Superior: Weiwei Song, Investment Manager

- Analyzed the data derived from online database (WRDS) to compare the affection of different factors on market share of 1480 fund companies under different strategies both in America and China.
- The data wrangling was done by Python; OSL and FGLS regressions on panel data was used by STATA.

RESEARCH EXPERIENCE

Design and Implement "SCR" R package | Co-Founder & Team leader **Feb 2020 - Present**
Advisor: Kathy (Xi) Zhou, Weill Cornell Medicine

- Designed and implemented most of "SCR" R package; allocated work to team members and did the follow-up maintenance of this package.
- This package serves as an associate tool to help students check their self-implemented R codes outcome as well as get a deep understanding to the book "Statistical Computing with R".
- The "SCR" package can be found and downloaded from my GitHub via this link: https://github.com/Creatran/SCR

Environmental Impact Calculator Shiny App **Oct 2019**
Advisor: Prof. Sweeney, Weill Cornell Medicine

- Designed a shiny app for Happy Valley Meat Company to calculate the environmental impact for each cut of meat. Drew bar plots and word cloud plot to visualize the environment impact with the help of R packages `ggplot`, `ggplotly`, and `wordcloud`.
- Leaded and collaborated with my teammates on App design. Mainly in charge of coding part of both UI and Server.
- The shiny.io website can be reached here: https://tianran.shinyapps.io/midterm_project/

3D Free-Form Deformation using VTK **Jun 2018 – Sep 2018**
Advisor: Xiahai Zhuang, Fudan University

- Transformed real-world object's position and shape to present a 3D shape reconstruction.
- Performed free-form deformations for the 3D Object based on VTK on Python.
- Collaborated with team members to solve the problems that came across during the project and used matrix calculation to speed up the programming procedure by 5 times.

TECHNICAL SKILLS

Programming	R, LaTeX, SQL, MATLAB, Stata, Python (Including ML techniques such as K-means, PCA, and KNN),
Statistics	Regressions, Survival analysis, ANOVA, Hypothesis test, Model selection.
Study Design	Clinical trials, observational study, and related applications.

AWARDS

- Third Prize in the National Collegiate Modeling Contest **2018**
- Fudan University Major Scholarship **2018, 2017, 2016**
- 1st Prize in the National Olympiad in Mathematics **2015**
- 1st Prize in the National Olympiad in Informatics **2015**