Runqiu (Paul) Zhang

paulzrq@126.com Tel: (+86) 187-1795-8836

Academic Qualifications

Yale University,City of New Haven,America
Master of Science Biostatistics *expected Jul. 2024*

East China University of Science and Technology (ECUST), Shanghai China
Bachelor of Mathematics and Applied Mathematics *expected Jul. 2022*

- Major GPA: 91.09 / 100 GPA: 89.31 / 100 Ranking: 6 / 90

Work Experience

Consultants for Global Leadership (CGL) *Shanghai, China*
Knowledge Center Analysist *Jul. - Aug. 2020*

- Investigated possible time series relationship between the market value of a listed company and its number of recruiters through develop a website crawler for data collection.
- Built an index model of consultant's growth ability to track the consultants' performance by utilizing multiple linear regression model and neural networks.

Academic Projects

Brain-inspired Spatial Cognition Algorithm *Aug. - Oct. 2021*

- Investigated how the discharge activity of place cells and cluster of grid cells coded the spatial position of the animal itself and contributed to the comprehension of the representation of spatial information by place cells and grid cells .
- Performed decoding error analysis of place cells and determined the relationship between the number of the cells and the decoding error.

Empirical Research on Influencing Factors of Carbon Footprint Pricing *Jun. - Sep. 2021*

- Clarified the explanatory variables from the aspects of international energy futures prices, etc., and established the functional relationship via stepwise and multiple linear regression.
- Implemented neural network, Gaussian regression and other machine learning methods to enhance the interpretability of model pricing financial derivatives related to carbon emission rights.

Study on the SEIQR Pandemic Model *May. 2020*

- Implement an SEIR model to calculate the infected population and the number of casualties of COVID-19 and optimized the model as an SEIQR one through integrating the parameters such as isolation factors, the number of hospitalizations, etc.
- Simulated the process of COVID-19 based on the parameters of infection rate, fatality rate, cure rate, etc. and compared the simulation with the real situation.
- Constructed a BP neural network model to predict the short-term development of COVID-19, evaluate the effectiveness of public health policies executed at New York State, South Korea, and the United Kingdom, separately.

Competitions

2020 China University Mathematical Contest In Modeling *Sep. 2020*
National Second Prize (Top 3%)

- Developed a corporate credit rating model based on 6 primary indicators and 22 secondary indicators affecting corporate risk, to facilitate delivery of feasible a risk management strategy.
- Applied BP neural network for rating and classifying 302 corporates through comparisons with support vector machines, decision tree, and naive Bayes models, etc.

2020 Mathematic Contest In Modeling *Apr. 2020*
Meritiorious Winner (Top 8%)

- Developed natural language processing methods to analyze the product reviews on Amazon and performed correlation analysis to clarify factors making impacts on sales volume.
- Established a forecast model of product sales after analyzing customers' information acquisition preferences in the consumption process through Elaboration Likelihood Model (ELM).

Leadership

PwC Campus Ambassador, ECUST *Aug. 2020 - Present*

Miscellaneous

Tests: GRE: 331+3.5 (*Verbal 161/88%, Quant 167/89%*); TOEFL: 109 with speaking 25
Mathematics & Statistics: Discriminant Analysis, Cluster Analysis, Principal Component Analysis, Factor Analysis, Optimization, Real Analysis, Functional Analysis, Time Series Theory
Programming: Algorithms, Data Structures, Database, *proficient in* Python, Matlab and SQL