

Yu Leng

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EDUCATION

Duke Kunshan University.

Aug 2018 - Jun 2022

Data science. Bachelor

Duke University

Jul 2019 - Aug 2019

Innovation and Entrepreneurship Summer Program.

Durham

RESEARCH RESULTS

Papers Under-review:

- **Yu Leng**, Xurui Jin, Enying Gong, Shangzhi Xiong, Yao Yao, Rajesh Vedanthan, Zhenchun Yang, Keren Chen, Chenkai Wu, Lijing Yan, Neighborhood-Level Public Facilities and COVID-19 Transmission: A Nationwide Geospatial Study In China, *Scientific Reports*, Under-review
- **Yu Leng**, Ruoyu Ying, Yaxi Li, Tinglong Zhu, Xurui Jin (Corresponding), Lijing Yan, Cognitive Reserve and All-Cause Mortality Among Chinese Oldest Old, *JAGS*, Under-review
- Hao Zhang, Kehan Zhang, **Yu Leng**, Yali Zhao, Yi Zeng, Junfeng Jim Zhang, Yao Yao, Xurui Jin, Nature contact by window opening and depressive symptoms among Older Adults: A cross-sectional analysis of the Chinese Longitudinal Healthy Longevity Survey, *Environmental Pollution*, Under-review
- Xurui Jin, Kaixi Cao, Minghao Zhao, **Yu Leng**, Junfeng Zhang, Yao Yao, Yi Zeng, Residential Proximity to Major Roadways and Cognitive Function among Chinese Adults 65 Year and Older, *Environmental Res*, Under-review

Conference summary:

- APOE ϵ 4 Genotype, Lifestyle Profiles, and Cognitive Function among Chinese Oldest Old, Alzheimer's Association International Conference 20TH, 2020

INTERNSHIP EXPERIENCE

Roche Pharmaceuticals

Aug 2020 - Present

Data Management Engineer Biometrics Department

- Conducted daily data manipulation and inspection
- Developed an R package and Shiny app for tracking and displaying the data changes in clinical trials

Global Health Research Center, Duke Kunshan University

Nov 2018 - Oct 2020

Research Assistant

- Performed data processing, conducted statistical analysis and visualization through python or R for multiple research topics such as cognitive function and cognitive reserve of the aging population, obesity and mortality, and the COVID-19 transmission.

Medical Physics Enrollment Department, Duke Kunshan University

Oct 2018 - Mar 2019

Administrative Assistant

- Participate in the organization and planning of campus open days, public lectures and other publicity activities
- Compile and translate 10+ WeChat public account articles

PROJECT EXPERIENCE

Artworks Classification with Machine Learning and Deep Learning

Apr 2020 - May 2020

- Predicted the artists and genres of a painting with trained CNN models for feature extraction and tree-based classifiers like random forest xgboost; the accuracy of predicting the genres reaches 85+%

National Natural Science Foundation Funded Project CEBA

Nov 2018 - Oct 2019

- Conducted literature review and data extraction; designed NCD related questionnaire and collected 70+ questionnaires through on-site interview; Conducted data input and cleaning

PROGRAMMING ABILITY

- **Python:** Proficiency in the basic grammar of python, familiar with the usage of NumPy, Pandas, Matplotlib, Scikit-learn and other packages; familiar with Keras architecture; written web crawler
- **R:** Familiar with data processing and manipulation; familiar with biostatistical analysis and modeling; written Shiny app
- **Java:** Familiar with object-oriented programming and basic algorithms and data structures; written audio-video visualization game in Processing
- **SQL:** Basic knowledge in data accessing and modifying

OTHER BACKGROUND

- **Languages:** Chinese (native), English (proficient, TOEFL 109), French (basic)
- **Interests:** Ballet dance: passed the Beijing Dance Academy Amateur 8 (full level), participated in Berlin International Dance Competition and won the third prize; art: designed and printed personal painting postcards
- **Events experience:** Head of the high school dance troupe; established perfume club in high school; founder of Chinese dance club in university
- **Character traits:** Optimistic, logical, resilient, cooperative