Mingze "Rico" Huang, Ph.D.

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Employment History

2023 🔖 **Freelance Statistician (Data Scientist)**
Validate statistical models' conceptual soundness, data integrity, statistical validity, and outcome analysis for a local credit union
Build *R* and *Python* packages for automatic high-frequency trading analysis to significantly reduce the workload of analysts for Ophelia Riego Health Fund, llc.
Lead a project of event study on the effect of supreme court decision on stock market abnormal returns by high-frequency data for Eonum Inc.

2016 – 2022 🔖 **Primary Instructor & Teaching Assistant** @ Texas A&M University
ECON410: Macroeconomic Theory
ECON459: Games & Economic Behavior
ECEN360/STAT315: Special Topics: Computational Data Science
ECMT460/660: Mathematical Economics
ECMT674: Economic Forecasting
ECON675: Capstone for Financial Economics & Financial Econometrics
ECON330: Economic Development
ECON612: Money, Banking & Financial Market
ECON203: Principle of Economics
ECON611: Foundation of Macroeconomic Theory
ECMT461: Economic Data Analysis

2012 – 2014 🔖 **Data Analyst** @ Bohai Property Insurance Co.Ltd.

Education and Professional Certifications

2023 🔖 **IBM Data Engineering Professional Certificate**

🔖 **IBM Data Analyst Professional Certificate**

🔖 **IBM Data Science Professional Certificate**

2016 – 2022 🔖 **Ph.D., Texas A&M University** in Econometrics & Quantitative Economics
Dissertation title: *Estimation of Latent Correlations between Mixed Types of Measurements with Applications in Social-Economic Research*

🔖 **M.Sc., Texas A&M University** in Statistics (Statistical Data Science)
Project title: *latentcor: An R Package for estimating latent correlations from mixed data types*

2014 – 2016 🔖 **M.Sc., Texas A&M University** in Financial Economics & Financial Econometrics

2014 🔖 **Summer Institute, Tel Aviv University** in Middle East Studies & Entrepreneurship

2006 – 2012 🔖 **B.Sc. and M.Sc., Nankai University** in Economics, Risk Management & Insurance

Peer-Review Publications and Software Development

Journal Articles

1   **Mingze Huang**, C. L. Müller, and I. Gaynanova, "Latentcor: An r package for estimating latent correlations from mixed data types," *Journal of Open Source Software*, vol. 6, no. 65, p. 3634, 2021. 🔗 URL: https://joss.theoj.org/papers/10.21105/joss.03634.

Working Papers

1   **Mingze Huang** and I. Gaynanova, "Pca with latent correlation," 2022.

2   **Mingze Huang**, C. L. Müller, and I. Gaynanova, "The efficacy of covid government response policy: Application of estimating latent correlations between serially correlated mixed data," 2022.

3   A. Rogovskyy, **Mingze Huang**, and S. Crawford, "Genetic background affects mouse responses to lyme disease pathogen," 2022.

4   **Mingze Huang**, C. L. Müller, and I. Gaynanova, "Latentcor is a python package for aggregated cell-type level data analysis," 2021.

Software Development

1   **Mingze Huang**, *acpc: An R Package with Shiny App for Area Classification based on Census Data.* 🔗 URL: https://github.com/mingzehuang/acpc.

2   **Mingze Huang**, C. L. Müller, and I. Gaynanova, *latentcor: A Python Package for Estimating Latent Correlations from Mixed Data Types.* 🔗 URL: https://pypi.org/project/latentcor/.

3   **Mingze Huang**, G. Yoon, C. L. Müller, and I. Gaynanova, *latentcor: Fast Computation of Latent Correlations for Mixed Data.* 2022, R package version 2.0.1. 🔗 URL: https://CRAN.R-project.org/package=latentcor.

4   G. Yoon, **Mingze Huang**, and I. Gaynanova, *mixedCCA: Sparse Canonical Correlation Analysis for High-Dimensional Mixed Data.* 2022, R package version 1.6.2. 🔗 URL: https://CRAN.R-project.org/package=mixedCCA.

Skills

Languages	🔖 Strong reading, writing and speaking competencies for English, Mandarin Chinese, Hokkien.
Coding	🔖 Python (NumPy, SciPy, Pandas, Plotly, Keras, Joblib, Matplotlib, Seaborn, Scikit-learn, TensorFlow…), R (doparallel, ggplot2, …), SQL, LaTeX, Unix Bash Script, Linux/Ubuntu, …
Databases	🔖 MySQL, SQLite.
Misc.	🔖 Statistical Computing, Econometrics, Machine Learning, Research, and Teaching.

Miscellaneous Experience

Fellowship and Awards

2016 – 2022   🔖 **Ph.D. Teaching/Research Assistantship, Ph.D. Dissertation Fellowship, International Texas Public Education Grant**, Texas A&M University.

Peer-Review Services

2021 – · · · ·   🔖 **Journal of Open Source Software**

            🔖 **PLOS One**

Miscellaneous Experience (continued)

Professional Associations

- ◼ **American Statistical Association (ASA)**
- ◼ **Institute of Electrical and Electronics Engineers (IEEE)**

References

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Department of Statistics, Texas A&M University
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