Ruiyan Huang

Email | LinkedIn | GitHub | Website

EDUCATION

Yale University Expected May 2026

B.S., Data Science and Statistics; B.A., Environmental Studies GPA: 3.93/4.00

- ***Coursework:*** Machine Learning, Data Structures, Algorithms, Multivariate Statistics, Probability, Casual Inference, Renewable Energy Finance, Strategic Market Measurement
- ***Teaching Assistant*** for: Statistical Theory, Linear Models

PROFESSIONAL EXPERIENCE

***Quantitative Analyst Intern* | LVMH x Carbon Containment Lab** Sep 2024 – present

- Developed a ***green finance*** screening tool to evaluate real estate portfolios' eligibility for climate investment based on emissions intensity and retrofit potential.
- Forecasted refrigerant emissions for U.S. and China commercial real estate using ***time-series*** models, boosting planning accuracy.
- Built a ***Monte Carlo*** climate-economic model (1,000+ simulations, 8 parameters) to estimate social costs and guide policy.
- Interviewed industry experts at McKinsey, RMI, ICF, CBRE, and other major firms to validate model assumptions and policy recommendations.

***Machine Learning Intern* | Shan Shui Conservation Center** Jan 2025 - present

- Engineered image recognition pipeline for identifying individual snow leopard using ***PyTorch*** and ***OpenCV***; benchmarked multiple algorithms (CosFace, PIE, HotSpotter) for precision under noise.

***Biostatistics Research* | Yale School of Medicine (Dr. Guan Leyin)** Mar 2025 – present

- Evaluated the performance of novel convex M-estimators on small-sample public health data using ***R***; assessed estimator robustness and applicability in medical.

***Sustainability Data Analyst Intern* | Suzano S.A.** Feb 2024 – Aug 2024

- Analyzed ESG disclosures and financial filings from benchmark firms using SQL and ***Power BI*** to identify reporting gaps.
- Developed ***Tableau*** visualizations and ***Excel*** macros to recommend disclosure improvements for CDP Climate Change scoring, directly informing external stakeholder reports.

***GIS Intern* | Yale School of Environment (Dr. William Lauenroth)** Apr 2023 – Oct 2023

- Classify ecological recovery patterns in Wyoming grasslands using unsupervised algorithms.
- Preprocessed large-scale geospatial datasets and georeferenced environmental data in ArcGIS.

Independent Math Researcher 2020 - 2023

- Simulate triangulations and quivers on non-orientable surfaces in MATLAB and proved theoretical formulae. Publication at Involve Math Journal (2023) and arXiv:2201.05643 (2022).

LANGUAGES & FRAMEWORKS

Languages: Python (Pandas, NumPy, Scikit-Learn, TensorFlow, PyTorch), TypeScript, SQL, R, C
Tools: React, HTML/CSS, Power BI, Tableau, ArcGIS, Excel (advanced: pivot tables, macros), Git
Cloud & DevOps: AWS (basic), Docker (basic)

PROGRAMS & FELLOWSHIPS

Richter Fellowship for International Research (2023), International Study Award (2022), Yale Summer in Astrophysics (2021), Stanford University Mathematics Camp (2021)