Yidi (Eddie) WU

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EDUCATION

Brown University **Providence, US**
Ph.D. in Econometrics & Statistics, supervised by Prof. Toru Kitagawa *Aug 2022 – May 2026 (expected)*

- Coursework in Probability Theory, Mathematical Statistics, Computational Statistics, Machine Learning, Bayesian Inference, Optimization, Time series, Econometric Theory, Stochastic Calculus, Causal Inference.

Imperial College London **London, UK**
M.Sc. in Computing (AI and Machine Learning) *Sep 2020 – Sep 2021*

- Graduated with Distinction (GPA 4.0/4.0 equiv.) and coursework in Deep Learning, Reinforcement Learning, Large Language Models, Operations Research, Computational Finance, and Computer Vision.
- Worked extensively with PyTorch, TensorFlow, XGBoost, scikit-learn, SciPy, R, and MATLAB.

University of Cambridge **Cambridge, UK**
B.A. (Hons) in Economics & Statistics *Oct 2017 – Jun 2020*

- Graduated with First-Class Honors (GPA 4.0/4.0 equiv.) and coursework in Statistics and Econometrics.

RELEVANT EXPERIENCE

Amazon **Seattle, US**
Researcher Intern *Jul 2025 – Sep 2025*

- Analyzed large-scale proprietary historical and real-time Amazon sales and customer datasets to identify stable patterns and key features with consistent or reliably modeled dynamics, improving the predictions of Amazon sales at aggregate, product group and customer segment levels; uncovered insights that Amazon scientists deemed valuable and are currently being integrated into existing forecasting framework.
- Develop Bayesian time series models (latent dynamic factor models and state space models) in Python for Amazon revenue predictions, attaining 1-12 month ahead forecast percentage error of ~2%.

Cubist Systematic Strategies **New York, US**
Quantitative Researcher Intern *May 2025 – Jul 2025*

- Conducted alpha research on multi-terabyte alternative datasets by designing efficient data processing pipelines with PyArrow and Pandas, significantly reducing computation time; explored and generated a broad range of alpha signals, carried out backtests, and performed ex-post signal analysis.
- Analyzed and developed predictive models for Barra style factor returns using classical time series methods and machine learning (random forest, XGBoost), incorporating feature engineering, cross validation and hyperparameter tuning; built a full backtesting framework for model evaluation.

Brown University **Providence, US**
Ph.D. Candidate (Academic Research) *May 2024 – Present*

- Combined multi-armed bandits and Thompson sampling with random forest and shrinkage estimators such as LASSO regression to do high-dimensional variable selection, attained computational gains via stochastic optimization and improved the accuracy of selecting true variables relative to without bandits by ~25%.
- Developed variational autoencoders (VAE) methods to generate synthetic data from real data to augment finance and macroeconomics datasets with the aim of improving prediction accuracy.
- Predicted the counterfactual economic outcomes of the UK without Brexit using synthetic control methods regularized by ridge regression and estimated a cumulative drop in real GDP by ~10-16% post Brexit.

J.P. Morgan **London, UK**
Global Markets Summer Analyst *Jun 2019 – Aug 2019*

- Utilized time series methods including factor models to analyze stock returns, swap rates and the Greeks of stock options; build a program in Excel VBA to monitor swap rates and automate Bloomberg data query.
- Rotated among Equities, Currencies and Emerging Markets rates trading desks to gain insights into trading, pricing, hedging, and risk management of derivatives including futures, swaps, options, and exotics.

ADDITIONAL INFORMATION

Language: English (fluent), Mandarin (fluent), French (basic).

Technical: Python, Machine Learning libraries, R, SQL, MATLAB, Excel (basic in VBA).