

Wei Zhang

CONTACT INFORMATION	Department of Economics Johns Hopkins University 3100 Wyman Park Dr, Baltimore MD 21211, USA	<i>Office:</i> Wyman Park Building 595 <i>E-mail:</i> wei.katie.zhang@gmail.com
RESEARCH INTERESTS	Large Bayesian VARs, stochastic volatility models, dynamic factor models, variational inference, tree-based models.	
EDUCATION	Purdue University , West Lafayette, IN USA PhD, Economics, August 2025 Thesis: Flexible Bayesian Time-Series Models in a Data-Rich Environment Humboldt University of Berlin , Berlin, Germany M.S., Econometrics, August 2017 University of International Business and Economics (UIBE) , Beijing, China Master of Economics, International Trade, June 2017 Zhongnan University of Economics and Law (ZUEL) , Wuhan, China B.A., June 2014	
HONORS AND AWARDS	Purdue University: Doctoral Student Research Fund, 2024; Summer Research Grant 2022, 2024; Frederick N. Andrews Fellowship, 2019, 2020 UIBE: Graduate Student Scholarship, 2014-2016; ZUEL: Excellent Graduate of Class 2014; National Scholarship, 2013.	
WORKING PAPERS	“Bayesian Dynamic Factor Model for High-dimensional Matrix-valued Time Series” (under review) “Measuring Inflation Risk Using Matrix Dynamic Factors: A Granular Approach for the Euro Area” (with Joshua C. C. Chan and Marta Bańbura) “Bayesian Model Comparison for Large Bayesian VARs after the COVID-19 Pandemic” (with Joshua C. C. Chan and Xuewen Yu, Journal of Econometrics , <i>forthcoming</i>) “Asymmetric Dynamic Factor Model” (with Joshua C. C. Chan)	
ACADEMIC EXPERIENCE	Purdue University , West Lafayette, Indiana USA <i>Teaching assistant</i> August 2019-present <ul style="list-style-type: none">• Providing students with a deep understanding of regression techniques, causal inference, and predictive modeling.• Led sessions in macroeconomics, financial valuation and investment analysis, covering discounted cash flow models, portfolio optimization and asset pricing theory.• Emphasized both mechanical and intuitive understanding of statistical methods to prepare students to apply models to real-world problems and critique empirical strategies.	

- *Undergraduate*
 - Econ 210 Principals of Economics (Spring 2020)
 - Econ 251 Microeconomics (Fall 2019)
 - Econ 340 Intermediate Microeconomics (Fall 2020)
- *Masters*
 - Econ 572 Econometrics (Summer 2023)
 - Econ 576 Statistical and Machine Learning (Fall 2024)
 - Econ 590 (MY1) Financial Valuation (Fall 2021)
 - Econ 590 (MY3) Investments (Fall 2021, Fall 2022)
- *Ph.D.*
 - Econ 606 Microeconomics I (Fall 2020)
 - Econ 671 Economics (Fall 2023)
 - Econ 674 Econometrics (Spring 2022, Spring 2023, Fall 2024)
 - Econ 693 Bayesian Econometrics I (Fall 2023, Fall 2024)

Research Assistant

August 2019 -present

- Conducted comprehensive literature reviews to support research in behavioral economics, industrial organization, labor economics, and macroeconomics.
- Collected, cleaned, and managed high-dimensional datasets from diverse sources, ensuring accuracy and consistency across variables and time periods.
- Performed econometric analysis using to identify empirical relationships and generate insights for academic and policy-oriented research.

CONFERENCE, SEMINARS AND WORKSHOPS

SEA 94th Annual Meeting, *Graduate Student Award*, November, 2024.

NABE Tech Economics Conference & Industry Job Fair, October, 2024.

European Central Bank, DG-E Internal Seminar, August, 2024.

Purdue University, Department of Economics, Economics Workshop, 2022, 2021

REFEREEING

Journal of Business & Economic Statistics, Journal of Forecasting, Journal of Quantitative Economics

PROFESSIONAL EXPERIENCE

European Central Bank, Frankfurt am Main, Germany

Summer Trainee

July 2024-August 2024

Collaborated with leading economists on the project “Inflationary Pressure Tracking in Euro Area”. Presented the paper “Bayesian Dynamic Factor Model for High-dimensional Matrix-valued Time Series” with its application to an inflation panel in Euro area in the internal seminar. Refined the model to address missing data challenges and enhance inflation forecasting accuracy.

SKILLS

- Statistical Softwares: R, MATLAB, Python
- Languages: Chinese (native), English (fluent), Japanese (beginner), German (basic)