Wei Zhang

CONTACT Information Department of Economics

Purdue University 100 Grant St, West Lafayette,

IN 47907, USA

RESEARCH INTERESTS

Large Bayesian VARs, stochastic volatility models, dynamic factor models, variational inference, tree-based models.

E-mail: zhan3721@purdue.edu

EDUCATION

Purdue University, West Lafayette, IN USA

Ph.D. Candidate, Economics, August 2019 (expected graduation date: August 2025)

Office: KRAN 488

• Advisor: Joshua C. C. Chan; GPA: 3.9

Humboldt University of Berlin, Berlin, Germany

M.S., Econometrics, August 2015-August 2017

University of International Business and Economics (UIBE), Beijing, China

Master of Economics, International Trade, September 2014-June 2017

Zhongnan University of Economics and Law (ZUEL), Wuhan, China

B.A., September 2010-June 2014

Honors and Awards Purdue University: Doctoral Student Research Fund, 2024; Summer Research Grant 2022, 2024; Federick N. Andrews Fellowship, 2019-2021

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" (Job Market Paper)

"Inflationary Pressure Tracking in the Euro Area: A Matrix Dynamic Factor Approach with Missing Data Resolution" (in progress, 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, major revision at Journal of Econometrics)

"Asymmetric Dynamic Factor Model" (with Joshua C. C. Chan)

ACADEMIC EXPERIENCE Purdue University, West Lafayette, Indiana USA

Teaching assistant

August 2019-present

Duties at various times have included office hours, grading, preparing homework assignments and finals, and leading weekly review sessions.

- 2019-2020 ECON 251: Microeconomics; ECON 210: Principles of Economics
- 2020-2021 ECON 340: Intermediate Microeconomic Theory; ECON 606: Microeconomics I
- 2021-2022 ECON 590 (MY1): Financial Valuation; ECON 590 (MY3): Investments; ECON 674: Econometrics
- 2022-2023 ECON 590: Investments; ECON 674: Econometrics; ECON 572: Econometrics

- 2023-2024 ECON 693: Bayesian Econometrics I; ECON 671: Economics
- 2024-2025 ECON 693: Bayesian Econometrics I; ECON 674: Econometrics

Research Assistant

August 2019 -present

My responsibilities have included conducting literature reviews, as well as collecting and cleaning data. I have had the privilege of working with the following professors:

• Elchin Suleymanov, David Gill, Miguel Sarzosa, Ralph Siebert and Mario Crucini

CONFERENCE, SEMINARS AND WORKSHOPS

SEA 94th Annual Meeting, 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

Collaborated with Marta Bańbura 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.

Ziroom, Beijing, China

Pricing Analyst

Feburary 2019-May 2019

July 2024-August 2024

Responsible for development and innovation of predictive models for housing prices in China; Delivered data analysis findings to management.

China Mobile Research Institute, Beijing, China

Strategy Analyst

August 2017-October 2018

Responsible for development of strategies and plans that define how information technology should be utilized to support the Group's overall business strategy. Managed a small team to analyze the macroeconomic conditions, designed and developed best practice business changes, e.g., digital transformations.

Accenture, Beijing, China

Strategy Consultant Intern

September 2016-February 2017

Collaborated with team members dedicated to developing data-driven insights and practical strategies to support clients' business objectives. Responsible for crafting and delivering coherent and logical narratives to clients that effectively convey our strategic plans.

SKILLS

- Statistical Softwares: R, Matlab, Python
- Algorithms: Markov Chain Monte Carlo simulations of Bayesian posterior distributions, variational algorithms, nonlinear state-space filters, regression trees
- Languages: Chinese (native), English (fluent), Japanese (beginner), German (basic)

PERSONAL INFORMATION

• Chinese citizen, US permanent resident