

EDUCATION

University of Wisconsin–Madison

M.S., Economics; 3.50 GPA

B.A., Economics; 3.32 GPA (3.51 Major)

Expected May 2024

May 2021

PROJECTS

Real Estate Market Analysis

May 2023–Dec. 2023

- Analyzed market performance on absorption, vacancy, and capitalization rates to identify market trends using CoStar data.
- Integrated demographic data, zoning regulations, and development plans to assess and mitigate risk factors.
- Enhanced the accuracy of the hedonic HPI by benchmarking against alternative HPIs, to strengthen the market assessment.

Comprehensive Urban Planning Strategy Development ([Link](#))

May 2023–Dec. 2023

- Conducted socioeconomic analysis on housing expenditure share and mortgage market using census and HMDA data.
- Critically assessed Madison’s comprehensive city plan and proposed strategic improvements to the mayor.
- Constructed and modified the Small Business Vulnerability Index to enhance opportunity generation for small businesses.

Spatial Analysis of Labor Distribution in Urban Planning ([Link](#))

May 2023–Dec. 2023

- Designed a general equilibrium model to analyze the spatial labor misallocation driven by zoning regulations across the US.
- Conducted a counterfactual analysis that revealed significant improvements in spatial misallocation since 2010.
- Evaluated the alignment of the new model with *Hsieh and Moretti* (2019) using kernel density estimation techniques.

WORK EXPERIENCE

Center for Research on the Wisconsin Economy (CROWE) at UW–Madison

Jan. 2024–May 2024

Graduate Research Assistant

- Executed industrial market analysis and presented industry trends at a state level to Professor Kim Ruhl.
- Developed interactive maps to visualize contracts by firm location and optimized the publication process using *APIs*.
- Investigated the inflow-outflow dynamics of federal contracts and grants by firms and sectors in the Midwest using *Python*.
- Assessed higher education’s longitudinal effect on earnings, examining the variations across majors and institutions.

Professor Paolo Martellini at UW–Madison

Jan. 2023–Aug. 2023

Research Assistant

- Developed a database containing real estate, zoning, and tax data from Chicago and NYC for Professor Paolo Martellini.
- Created spatial map on *Python* for housing prices, land use, and density restrictions, which were distributed to the faculties.
- Synthesized research findings into summaries for the working paper ‘*Local Labor Markets and Aggregate Productivity*’.

Republic of Korea Army

Oct. 2018–May 2020

Sergeant

- Managed complex warehouse inventory and logistics and oversaw supplier contracts for the procurement of goods.
- Optimized the demand forecast model to significantly improve resource allocation across 64 subsidiary battalions.
- Enhanced leadership and tactical communication by directing soldier training exercises in extreme cold weather conditions.

Institute for Development and Human Security

May 2017–Aug. 2017

Research Assistant

- Mapped the dynamics of economic and demographic interests in developing countries.
- Organized and promoted the *2017 International Health Student Writing Competition*.
- Drafted a grant report analyzing OECD development aid for submission to the *Bill and Melinda Gates Foundation*.

SKILLS

Python, R, Stata, QGIS, SQL, Tableau, LaTeX, MS Office

LANGUAGES AND CERTIFICATE

English (Fluent), Korean (Fluent)

Harvard Business School Online: Big Data for Social Good

Jan. 2022–Feb. 2022