CHUNGMANN KIM

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in linkedin | Github | Personal Website | Google Scholar

Champaign, IL, USA

RESEARCH INTERESTS

Global Food Security · Health & Nutrition · AI for Humanitarian · Climate Change · International Development · Poverty & Food Security Measurement

EDUCATION AND TRAINING

• Bloomberg School of Public Health, Johns Hopkins University Postdoctoral Research Fellow at the Center for Humanitarian Health

• University of Illinois at Urbana-Champaign Ph.D. in Applied Economics (STEM)

 Seoul National University M.Sc. in Agricultural Technology

 Handong Global University B.Sc. in Environmental Studies (Cum Laude Graduate) 2026 - Present

United States

2025

United States

2019 Republic of Korea

Republic of Korea

WORKING PAPERS

"Hearing the Alarm: Do Donors Follow Institutional Crisis Signals?" Job Market Paper. [Draft] Selected presentation at UNU-WIDER Development Conference (awarded full travel support) · European Association of Agricultural Economists (EAAE) 2025 Congress · Agricultural and Applied Economics Association (AAEA) 2025 Annual Meeting (Poster)

"Hidden Hunger: Global Estimates Systematically Undercount Acute Hunger." With Lentz, E., Michelson, H., Baylis, K. Forthcoming at Nature Food (2025). [Draft | Replication Code]

"Inside the Black Box: How Consistent Are Global Food Security Crisis Assessments." With Lentz, E., Michelson, H., Baylis, K. Accepted, Food Policy . [Draft]

"Early-Year Milk Price and Child Stunting in Zambia." [Draft | Slides] Presented at AAEA 2022, EAAE 2023, Tata-Cornell 2023.

PUBLICATIONS (PEER-REVIEWED)

"Machine Learning for Food Security: Principles for Transparency and Usability." Zhou, Y., Lentz, E., Michelson, H., Kim, C., & Baylis, K. (2022). Applied Economic Perspectives and Policy . [DOI]

"Exploring the Association between Agricultural Production Systems and Household Diets in Viet Nam." Bandyopadhyay, A., Azzarri, C., Haile, B., Kim, C., et al. (2022). Food Security . [DOI]

"The Economics of the Soy Kit for Food Entrepreneurs." Kim, C. & Goldsmith, P. (2021). Food and Nutrition Bulletin. [DOI]

"Vietnamese Preferences for Fresh Korean Ginseng." Joo, Y., Kim, T., Nguyen, D.K., & Kim, C. (2021). Korean Journal of Agricultural Economics . [DOI]

WORK IN PROGRESS

"Systematic Review of AI and Statistical Models for Humanitarian Action." With Melissande, M. (European Commission – Joint Research Centre, EC-JRC).

"Acute Food Insecurity Data and Modelling." With Ronco, M. et al. (collaboration with EC-JRC).

"Multidimensional Food Security Indicators: Evidence from Sub-Saharan Africa." With Baylis, K., Lentz, E., Michelson, H. Presented at AAEA 2022 Track Session.

PROFESSIONAL EXPERIENCE

• Food and Agriculture Organization (FAO), IPC Global Support Unit

Data Scientist & Modelling Specialist

Feb 2024 - Present

Rome, Italy / Remote

 \circ Predictive modelling \cdot Multi-Source Data Integration \cdot AI Model Evaluation

• Prototype development: News-based risk monitoring tool

• Food and Agriculture Organization (FAO), IPC Global Support Unit

Food Security Analyst

Oct 2022 - Aug 2023 Rome, Italy / Remote

• IPC Accuracy Study · Descriptive and inferential analytics

• International Fund for Agricultural Development (IFAD)

Sep 2023 - Jan 2024

Impact Assessment Specialist

Rome, Italy / Remote

• IFAD11/12 dataset harmonization • 10+ countries • Geospatial and socio-economic indicators

• Create automated data pipelines · climate adaptation program evaluation (Nepal)

• International Food Policy Research Institute (IFPRI)

Oct 2018 - Jan 2019

Research Intern

Washington, DC

o International Dietary Data Expansion (INDDEX) project, Vietnam

 \circ Co-authored research on integrated farming systems and household diets

Canaan Farmer School

Ian 2015 - Dec 2017

Project and Training Officer

Korea & Tanzania

• Capacity building • Agriculture • Resilience • Microfinance

• Grant management • Cooperative development • Community development projects

POLICY WORK & TECHNICAL PROJECTS

Optimizing Classification Thresholds for Food Security Indicators

2025

FAO-IPC GSU Technical Project

• Threshold optimization · Household survey harmonization · Cross-country concordance

News Media Analytics for Risk Monitoring

2025

Policy Tool

FAO-IPC GSU & Kickstart AI (Netherland)

• News Monitoring using NLP / LLM · Sentiment analysis · Topic modelling · IPC risk integration [View Slides]

IPC Accuracy Study: Internal Consistency of AFI & AMN Analyses

2024

FAO-IPC GSU

Technical Report

Food Security Measurement Study [View Report]

• Production, Consumption, and Food Security in Viet Nam

Diagnostic Report

IFPRI, FAO, Tufts Univ.

• Agricultural production · Diets · Food security linkages [View Report]

Mapping of Poultry Hotspots in Tanzania

2018

Technical Note

IFPRI

• Geospatial analysis • Market hotspots • Poultry [View Report]

TEACHING

University of Illinois at Urbana–Champaign

Fall 2024

Teaching Assistant, ACE 251: The World Food Economy

Champaign, IL

 Delivered weekly in-class lectures: global food production, consumption, and trade · problems of hunger and population · the role of agricultural development, trade, and aid in relieving hunger

University of Illinois at Urbana–Champaign

Fall 2022, Fall 2023

Teaching Assistant, ACE 435: Global Agribusiness Management

Champaign, IL

· Assisted course coordination and grading · Global agribusiness strategy and operations · covered topics (international business environment · global agriculture suppy chain)

• Teaching Material Development

Data Science: Tools & Projects

2025

Online Repository

- Practical examples & reusable code for quantitative policy analysis
- · Methods: Python, Machine Learning, NLP, Geospatial Analysis, Causal Inference, LLMs, Dashboard Development
- Repository link: Data-Science-for-Policy-Research

METHODS & TOOLS (APPLIED IN RESEARCH)

 $\label{lem:programming/Data/GIS/Version Control:} Python \cdot R \cdot Stata \cdot SQL \cdot QGIS \cdot Tableau \cdot Git \cdot GitHub \\ \textbf{Applied Microeconometrics:} DiD \cdot event study \cdot RD \cdot IV \cdot matching (\textit{causal identification and policy evaluation}) \\ \textbf{Machine Learning:} \ random \ forest \cdot gradient boosting \cdot LASSO \cdot basic deep learning (\textit{risk monitoring and prediction}) \\ \textbf{NLP \& LLMs:} \ BERTopic \cdot named \ entity \ recognition \cdot sentiment \ analysis \cdot spaCy \cdot Hugging \ Face \cdot prompt \ engineering (\textit{news analytics and document classification}) \\ \end{cases}$

Geospatial: geostatistical analysis · spatial econometrics · hotspot and cluster analysis (mapping and spatial analysis)

CONFERENCE PRESENTATIONS

American Agricultural Economics Association (AAEA) Annual Meeting (2025) · Center on Food Security and the Environment (Stanford) Seminar (2025) · European Association of Agricultural Economists (EAAE) Conference (2023) · Tata-Cornell Institute for Agriculture and Nutrition (TCI) Conference (2023) · American Agricultural Economics Association (AAEA) Annual Meeting (2022)

OTHER ACTIVITIES

Professional Activities and Affiliations: Vice President, Graduate Student Organization, Department of Agricultural and Consumer Economics, UIUC (2020–2021) · Member, IPC Advanced Technologies and Artificial Intelligence (ATARI) Working Group (global initiative to enhance food security early warning leveraging AI tools) · Member, American Agricultural Economics Association (AAEA) (2022, 2025) · Member, European Association of Agricultural Economists (EAAE) (2023, 2025)

Public Engagement: Community engagement and humanitarian outreach, Champaign, Illinois (2020–2025): Led donation drives and mobilized resources for programs such as the Shoebox Ministry, Soup Kitchen, and Ready Program · Organized emergency fundraising activities, including humanitarian relief efforts for UNHCR, engaging and coordinating over 100 members of the Korean community; focused on social responsibility, community solidarity, and inclusive action during times of need.

HONORS & AWARDS

ACE Doctoral Fellowship, University of Illinois (Spring, Fall 2025) · Full Travel Grant, UNU–WIDER Development Conference (2025) · Travel Grant, American Agricultural Economics Association (AAEA) Annual Meeting (2025) · Departmental Travel Grant, ACE, University of Illinois (2025 Spring, 2025 Fall, 2022) · Banaba House Scholarship, Korea (2022–2024) · Cum Laude Graduate, Handong Global University (2015)

LANGUAGES

Korean (Native) · English (Fluent) · Chinese (Intermediate)

REFERENCES

1. Prof. Kathy Baylis

Professor and Vice-Chair Department of Geography University of California, Santa Barbara Email: baylis@ucsb.edu Profile Page

2. Prof. Erin Lentz

Associate Professor Lyndon B. Johnson School of Public Affairs University of Texas, Austin Email: erinclentz@utexas.edu Profile Page

3. Prof. Hope Michelson

Professor
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