# **CHUNGMANN KIM**

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in linkedin | Github | Personal Website | Google Scholar

Champaign, IL, USA

#### RESEARCH INTERESTS

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

#### **EDUCATION**

• University of Illinois at Urbana-Champaign

Ph.D. Candidate in Applied Economics (STEM)

• Seoul National University

M.Sc. in Agricultural Technology

• Handong Global University

B.Sc. in Environmental Studies (Cum Laude Graduate)

Expected May 2026

**United States** 

*June* 2019

Republic of Korea

Feb 2015

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. Revise & Resubmit at Nature Food . [Draft | Replication Code]

"Inside the Black Box: How Consistent Are Global Food Security Crisis Assessments." With Lentz, E., Michelson, H., Baylis, K. Revise & Resubmit at 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

∘ Predictive modelling · Multi-Source Data Integration · 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)

Impact Assessment Specialist

Sep 2023 - Jan 2024 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 Washington, DC

Research Intern

• International Dietary Data Expansion (INDDEX) project, Vietnam

· Co-authored research on integrated farming systems and household diets

• Canaan Farmer School Jan 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

Technical Project FAO-IPC GSU

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

## News Media Analytics for Risk Monitoring

2025

FAO-IPC GSU & Kickstart AI (Netherland) Policy Tool

• 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

2021

IFPRI, FAO, Tufts Univ. Diagnostic Report

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

#### · Mapping of Poultry Hotspots in Tanzania

2018

Technical Note

**IFPRI** 

 $\circ \ Geospatial \ analysis \cdot Market \ hotspots \cdot Poultry \ [View \ Report]$ 

## **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

2025

Data Science: Tools & Projects

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)

**Programming/Data/GIS/Version Control**: Python  $\cdot$  R  $\cdot$  Stata  $\cdot$  SQL  $\cdot$  QGIS  $\cdot$  Tableau  $\cdot$  Git  $\cdot$  GitHub

**Applied Microeconometrics**: DiD  $\cdot$  event study  $\cdot$  RD  $\cdot$  IV  $\cdot$  matching (causal identification and policy evaluation)

**Machine Learning**: random forest · gradient boosting · LASSO · basic deep learning (risk monitoring and prediction)

NLP & LLMs: BERTopic · named entity recognition · sentiment analysis · spaCy · Hugging Face · prompt engineering (news analytics and document classification)

**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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