

# SURAJ GHIMIRE, Ph.D.

U.S. Permanent Resident

Assistant Teaching Professor Department of Computer Science and Engineering, New Mexico Institute of Mining and Technology Socorro, NM 87801, USA Phone: 505-307-0353 Email: suraj.ghimire@nmt.edu

---

## RESEARCH INTERESTS

Environmental Economics; Energy Economics; Climate Change Economics; Health Economics; Environmental Justice; Renewable Energy Systems; Biogas and Anaerobic Digestion; Air Pollution Economics; Cost-Benefit Analysis; Applied Econometrics

## EDUCATION

**Ph.D. in Economics** August 2023

University of New Mexico, Albuquerque, NM

Dissertation: “Concentrated Animal Feeding Operations, Environmental Quality and Public Health”;

Committee: Jingjing Wang (Chair), Robert Berrens, Benjamin Jones, Gabriel Pacyniak

**M.A. in Economics** December 2019

University of New Mexico, Albuquerque, NM

**M.B.A. in General Management** May 2017

Southeast Missouri State University, Cape Girardeau, MO

**B.B.A. in Marketing** May 2013

King’s College, Nepal (affiliated with International American University)

## ACADEMIC APPOINTMENTS

**Assistant Teaching Professor** August 2022 - Present

Department of Computer Science and Engineering

New Mexico Institute of Mining and Technology, Socorro, NM

**Instructor** January 2022 - May 2022

Department of Economics

University of New Mexico, Albuquerque, NM

**Graduate Research/Teaching Assistant** January 2020 - May 2023

Department of Economics

University of New Mexico, Albuquerque, NM

**Graduate Assistant** January 2016 - May 2017

Harrison School of Business

Southeast Missouri State University, Cape Girardeau, MO

## TEACHING EXPERIENCE

### Graduate Courses

- EMGT 5004 Engineering Data Analytics (Fall 2025)
- EMGT 5010 Energy Markets (Spring 2024)

- EMGT 5004 Engineering Statistics (Fall 2022, 2023, 2024)
- EMGT 5090 Independent Study (Fall 2024)
- EMGT 5090 Final Project (Fall 2025)

### **Undergraduate Courses**

- ECON 2110 Principles of Microeconomics (Spring 2022; Fall 2022, 2023, 2024, 2025)
- ECON 2120 Principles of Macroeconomics (Spring 2022, 2023)
- ECON 3072 Natural Resources and Environmental Economics (Spring 2023, 2024)
- ACCT 2110 Fundamentals of Accounting I (Fall 2022, 2023, 2024, 2025)
- ACCT 2120 Fundamentals of Accounting II (Spring 2022, 2023, 2024)
- ENTR 0189 Introduction to Entrepreneurship (Fall 2024)
- MGMT 4081 Senior Seminar: Technical Management (Spring 2025)

## **PUBLICATIONS**

### **Peer-Reviewed Journal Articles**

1. Ghimire, S., Wang, J. (2025). “The Tipping Point: Economic Viability and Resilience of Dairy Manure Bioenergy Under Market and Policy Shocks.” *Energies*, 18(23), 6286.
2. Ghimire, S., Wang, J., Fleck, J.R. (2021). “Integrated Crop-Livestock Systems for Nitrogen Management: A Multi-Scale Spatial Analysis.” *Animals*, 11(1), 100.
3. Wang, Y., Ghimire, S., Wang, J., Dong, R., Li, Q. (2021). “Alternative Management Systems of Beef Cattle Manure for Reducing Nitrogen Loadings: A Case-Study Approach.” *Animals*, 11(2), 574.

### **Revise and Resubmit**

4. Ghimire, S., Goodkind, A., Jones, B. “Beyond the Threshold: The Hidden Economic Costs of Safe Ozone Pollution.” Revise and resubmit at *Applied Economics Letters*.
5. Ghimire, S., Goodkind, A., Wang, J. “The Health and Economic Impacts of Dairy Air Pollution: Evidence from New Mexico.” Revise and resubmit at *Journal of Agricultural and Resource Economics*.

### **Working Papers**

6. Ghimire, S., Wang, J. “Distributional Impacts of Exposure to CAFOs: A Case Study of Large Dairies in New Mexico.”
7. Ghimire, S., Wang, J. “Aligning Private Incentives and Public Health: A Social Cost-Benefit Analysis of Dairy Anaerobic Digesters.”

## **GRANTS AND AWARDS**

### **External Grants**

- Co-Principal Investigator, NSF Award “Harnessing AI for Spatial Environmental Risk Modeling and Mitigation,” Award No. 2520791, Total Amount: \$250,000, 2025-present.

- Co-author and Senior Personnel, Research and Public Service Project, New Mexico Legislature (SB 377 and SB 0192), successfully funded, 2022.

### **Awards and Honors**

- Regional Finalist (Mentor), EnergyTech University Prize, U.S. Department of Energy, \$5,000, 2025
- Doctoral Conference Presentation Award, Graduate Studies, University of New Mexico, \$1,200, 2022
- Zancada Graduate Fellowship, Vice President for Research, University of New Mexico, \$2,400, 2022
- Graduate Research Fellowship, Center for Regional Studies, University of New Mexico, \$23,000, 2021-2022
- J. Raymond Stuart Award, Economics, University of New Mexico, \$500, 2022
- Alfred L. Parker Scholarship, Economics, University of New Mexico, \$500, 2022
- Social Justice Scholarship, Northeast Agricultural and Resource Economics Association, \$1,200, 2022
- Berkeley/Sloan Summer School Diversity Fellowship, University of California, Berkeley, \$500, 2021
- Excellence International Scholarship, Graduate Studies, University of New Mexico, \$400, 2021
- University of New Mexico Leadership and Involvement Award, 2020
- Peer Mentorship Scholarship, Graduate Studies, University of New Mexico, \$3,500, 2019-2023
- GPSA International Scholarship, Graduate Studies, University of New Mexico, \$400, 2019
- University of New Mexico Amigo International Graduate Scholarship, \$16,000, 2018-2019
- Top 10, Southeast Innovation Challenge, Southeast Missouri State University, 2016
- Outstanding Academic Achievement Scholarship, King's College, Nepal, 2010-2013

### **CONFERENCE PRESENTATIONS**

#### **2025**

- “Feasibility Analysis of Anaerobic Digester Systems: Internalizing Social Benefits,” Southern Economic Association 95th Annual Meeting, Tampa, FL, November 22-24, 2025.
- “The Health and Economic Impacts of Dairy Air Pollution: Evidence from New Mexico,” Southern Economic Association 95th Annual Meeting, Tampa, FL, November 22-24, 2025.
- “Health Damages of Dairy Air Pollutant Emissions: An Assessment of New Mexico,” Association of Environmental and Resource Economists Summer Conference, Santa Ana Pueblo, NM, May 28-30, 2025.
- “The Health and Economic Impacts of Dairy Air Pollution: Evidence from New Mexico,” New Mexico Tech Research Colloquium, Socorro, NM, February 28, 2025.

#### **2024**

- “Managing Intermittency in Renewable Energy Generation: Is Hydrogen the Answer?” Southern Economic Association 94th Annual Meeting, Washington, DC, November 23-25, 2024.

- “Addressing the Intermittency of Renewable Energy: Evaluating Optimal Storage Solutions,” World Conference on Natural Resource Modeling, New Haven, CT, June 10-13, 2024.
- “Addressing the Intermittency of Renewable Energy: Evaluating Optimal Storage Solutions,” United States Society for Ecological Economics 13th Biennial Conference, Schenectady, NY, June 6-9, 2024 (virtual).

## **2022**

- “Distributional Impacts of Exposure to CAFOs: A Case Study of Large Dairies in New Mexico,” Southern Economic Association Annual Meeting, Fort Lauderdale, FL, November 21, 2022.
- “Distributional Impacts of Exposure to CAFOs: A Case Study of Large Dairies in New Mexico,” Agricultural and Applied Economics Association Annual Meeting, Anaheim, CA, July 31, 2022.
- “Distributional Impacts of Exposure to CAFOs: A Case Study of Large Dairies in New Mexico,” Northeast Agricultural and Resource Economics Association Annual Meeting, Mystic, CT, June 12-15, 2022.

## **2021**

- “Infant Health Impacts of Large Dairy Farms: A Case Study of New Mexico,” Canadian Resource and Environmental Economics Association Conference, October 8-9, 2021.
- “CAFOs and Infant Health: A Case Study of New Mexico Dairy Farms,” Institute for Humane Studies Graduate Conference, March 26, 2021.

## **2020**

- “Multilevel Assessments of Contribution of Livestock Manure to Nitrogen Budget in Arid-land Ecosystems,” New Mexico Research Symposium, November 9, 2020.
- “Multilevel Assessments of Contribution of Livestock Manure to Nitrogen Budget in Arid-land Ecosystems,” New Mexico Water Conference, October 26-29, 2020.

## **PROFESSIONAL SERVICE**

### **Academic Service**

- Session Chair, AERE at SEA Annual Meeting, 2022, 2025
- Panel Moderator, AAEA Annual Meeting, 2022
- Faculty Development Committee Member, New Mexico Tech, Fall 2025-present
- Management Program Assistant Professor Search Committee Member, New Mexico Tech, 2024-2025 (evaluated 35+ candidates, conducted interviews, participated in on-campus evaluations)

### **Reviewer Service**

- *Scientific Reports* (Nature), 2022
- *PLOS Climate*, 2023, 2024
- *Resources, Environment and Sustainability*, 2024, 2025
- AERE at SEA Conference, 2022

- AERE Summer Conference, 2025

### **Student Mentoring and Advising**

- Advisor, Investment Club, Computer Science and Engineering, New Mexico Tech, ongoing
- Research Mentor, Sophomore Research Program, New Mexico Tech (1 student, Fall 2024 - Spring 2025)
- Faculty Advisor, Business Ethics Case Competition, Daniels Fund, Santa Fe, 2024
- Grant Reader and Communications Chair, Graduate and Professional Student Association, University of New Mexico, 2019-2022

### **PROFESSIONAL AFFILIATIONS**

American Economic Association (AEA); Association of Environmental and Resource Economists (AERE); Northeast Agricultural and Resource Economics Association (NAREA); Southern Economic Association (SEA)

### **TECHNICAL SKILLS**

**Statistical software:** R, Python, Stata

**Programming:** Python, R, SQL, HTML, PHP, MySQL

**Modeling and simulation:** GoldSim, MATLAB

**Geospatial analysis:** QGIS

**Data visualization:** Tableau, Power BI

**Document preparation:** LaTeX, Microsoft Office Suite (Advanced Excel), Adobe Creative Suite

**Database management:** SQL, MySQL

### **PROFESSIONAL CERTIFICATION**

Benefit-Cost Analysis: Valuing Life and Health, Harvard T.H. Chan School of Public Health

### **LANGUAGES**

English (Fluent); Nepali (Native); Hindi (Fluent)

### **REFERENCES**

Available upon request