December 2019

# PRITHVIRAJ LAKKAKULA

Information E-mail: prithviraj.lakkakula@ndsu.edu

Web: rajlakkakula.netlify.app GitHub: github.com/rajlakkakula

CERTIFICATION Microsoft Corporation, Redmond, WA, USA

PROGRAMS Microsoft Professional Program (MPP) in Data Science

MIT Sloan School of Management, Cambridge, MA, USA September 2018

Blockchain Technologies: Business Innovation and Application

EDUCATION University of Florida, Gainesville, FL, USA August 2014

Doctor of Philosophy (Ph.D.) in Applied Economics

University of Arkansas, Fayetteville, AR, USA August 2010

Master of Science (M.S.) in Applied Economics

EDITORIAL Member of Editorial Council, 2018–2020

Position Journal of Agricultural and Resource Economics (JARE)

Professional Research Assistant Professor May 2021 – Present

EXPERIENCE Department of Agribusiness and Applied Economics

North Dakota State University, Fargo, ND, USA

Assistant Professor September 2020 – October 2020

Department of Agricultural and Environmental Sciences

Tennessee State University, Nashville, TN, USA

Research Assistant Professor January 2015 – August 2020

Department of Agribusiness and Applied Economics North Dakota State University, Fargo, ND, USA

Post-Doctoral Associate August 2014 – December 2014

Food and Resource Economics Department University of Florida, Gainesville, FL, USA

SKILLS R, Power BI, T-SQL, Microsoft R, Azure ML Studio, TSP.

Teaching Instructor Spring 2020

EXPERIENCE AGEC 344: Agricultural Price Analysis

Department of Agribusiness and Applied Economics North Dakota State University, Fargo, ND, USA

Co-Instructor [Primary Instructor: Dr. Frederick Riggins] Fall 2018

MIS 394: Independent Study: Blockchain Commerce Department of Accounting and Information Systems

College of Business

North Dakota State University, Fargo, ND, USA

Instructor

Fall 2016 & Spring 2017

ECON 341: Intermediate Microeconomics Department of Agribusiness and Applied Economics North Dakota State University, Fargo, ND, USA

Instructor

AEB 5516: Quantitative Methods in Agribusiness Food and Resource Economics Department University of Florida, Gainesville, FL, USA June 2014 – August 2014

#### Teaching Assistant

August 2010 - August 2014

Taught Selected Lectures in 1) AEB 3510: Quantitative Methods of Food and Resource Economics and 2) AEB 3450: Introduction to Natural Resources and Environmental Economics.

Food and Resource Economics Department University of Florida, Gainesville, FL, USA

#### Grants

- Awarded (as a Co-Principal Investigator) a \$86,000 grant proposal (*Transportation Study on the Rail Supply Chain from the U.S. to Mexico*) to US Wheat Associates [PI: Dr. William Wilson, Other Co-PIs: Dr. David Bullock and Dr. Wesley Wilson], June 2020.
- Awarded (as a Co-Principal Investigator) a \$67,064 grant proposal (International Market and Trade Policy Analysis for U.S. Field Peas and Lentils) to USDA/AMS/ND Department of Agriculture's Specialty Crop Block Grant Program [PI: Dr. Frayne Olson], June 2020.
- Submitted (as a Principal Investigator) a \$200,305 grant proposal (Detection of Foliar Diseases in Peas Using Image Analysis and Deep Learning) to USDA/AMS/ND Department of Agriculture's Specialty Crop Block Grant Program [Co-PIs: Dr. Simone Ludwig, Dr. Julie Pasche, Dr. William Wilson, and Dr. Frayne Olson], March 2019 [Not Funded].
- Awarded \$76,206 grant (as a Principal Investigator) for *Pea and Lentil Market Analysis* from USDA/AMS/ND Department of Agriculture's Specialty Crop Block Grant Program [Co-PIs: Dr. David Ripplinger and Dr. Frayne Olson], October 2015 June 2017.

# Publications [Peer-Reviewed]

- 16. **Lakkakula**, **P**., and Wilson, W. (2021). "How Blockchain Technology Impact Agriculture". Accepted for the *Handbook on Blockchain and Cryptocurrencies*. Edward Elgar Publishing.
- 15. Lakkakula, P., and Schmitz, A. (2021). "Obesity: Distributional Effects of Sweetener Taxes".

  Journal of Public Health: From Theory to Practice. DOI: 10.1007/s10389-021-01563-5
- 14. Lakkakula, P., Bullock, D., and Wilson, W. (2021). "Asymmetric Information and Blockchain in Soybean Commodity Markets". Applied Economics Perspectives and Policy. DOI: 10.1002/aepp.13159
- 13. Lakkakula, P., and Wilson, W. (2021). "Origin and Export Basis Interdependencies in Soybeans: A Panel Data Analysis". *Journal of Agricultural Resource Economics* 46(1): 69-84. DOI: 10.22004/ag.econ.302464
- 12. Wilson, W., and Lakkakula, P. (2020). "Secondary Rail Car Values in Grain Transportation and Basis Values". Agribusiness: An International Journal. DOI: 10.1002/agr.21677
- 11. Lakkakula, P., Bullock, D., and Wilson, W. (2020). "Blockchain Technology in International Commodity Trading". The Journal of Private Enterprise, 35 (2): 23–46
- 10. Lakkakula, P., and Schmitz, A. (2019). "U.S. Sweeteners: Combating Excess Consumption with an Excise Tax?". Agricultural Economics. DOI: 10.1111/agec.12508
- 9. Lakkakula, P. (2018). "Potential Impact of Sweetener Input Tax on Public Health". Applied Health Economics and Health Policy. DOI: 10.1007/s40258-018-0428-0
- 8. Lakkakula, P. (2018). "Time Series Versus Causal Forecasting: An Application of Artificial Neural Networks". International Conference on Time Series and Forecasting (ITISE), Granada, Spain, September 19–21, 2018.

- 7. Lakkakula, P., and Olson, F. (2017). "Sweeteners May Leave a Sour Note on NAFTA Renegotiations". Choices. Quarter 4.
- 6. Lakkakula, P. (2017). "What are the Effects of GST on Indian Agriculture? The Case of Turmeric". Economic & Political WEEKLY 52(41).
- Lakkakula, P. (2017). "Testing Causality Among Five Fertilizer Prices". Applied Economics Letters. DOI:10.1080/13504851.2017.1352067
- Lakkakula, P., Schmitz, A., and Ripplinger, D. (2016). "U.S. Sweetener Demand Analysis: A QUAIDS Model Application". Journal of Agricultural and Resource Economics 41(3): 533–548.
- 3. Lakkakula, P., Haynes, D.J., and Schmitz, T.G. (2015). "Genetic Engineering and Food Security: A Welfare Economics Perspective". Food Security in an Uncertain World (Frontiers of Economics and Globalization), Volume 15 (pp. 179–193). Bingley, UK: Emerald Group Publishing.
- 2. Lakkakula, P., Dixon, B. L., Thomsen, M. R., Wailes, E. J., and Danforth, D. M. (2015). "Global Rice Trade Competitiveness: A Shift-Share Analysis". Agricultural Economics. DOI: 10.1111/agec.12162
- 1. Lakkakula, P., and Schmitz, A. (2013). "Sugar and High Fructose Corn Syrup (HFCS) Consumption Shifts: Change in Tastes or Relative Prices?". *International Sugar Journal* 115: 555–559.

# Working Papers

- Lakkakula, P., and Huntington-Klein, N.C. (2022). The Effect of US-China Trade War on US Soybean Basis: A Synthetic Control Approach. Under Review.
- SenGupta, I., Awasthi, S., Wilson, W.W., and **Lakkakula**, **P**. (2022). Application of Machine Learning in Explaining Global Soybean Export Flows to China. Under Review.

SELECTED
CONFERENCE
PAPERS/RESEARCH
REPORTS

- Wilson, W., Bullock, D., and Lakkakula, P. (2020). Dynamic Changes in Rail Shipping Mechanisms for Grain. Agribusiness and Applied Economics Report No. 794. North Dakota State University.
- Lakkakula, P., Bullok, D., and Wilson, W. (2018). "Blockchain Technology in International Commodity Trading". Conference paper submitted to RAP on Blockchain conference in Fargo, North Dakota.
- Lakkakula, P., and Wahl, T. (2018). "Potential Effects of the Additional Duties Imposed by India on U.S. Chickpeas and Lentils". Research Report.
- Lakkakula, P., Olson, F., and Ripplinger, D. (2017). "Pea and Lentil Market Analysis". Research report submitted to North Dakota Department of Agriculture's Specialty Crop Block Grant Program.
- Lakkakula, P. (2016). "US HFCS Price Forecasting Using Seasonal ARIMA Model". Selected Paper prepared for presentation at the Southern Agricultural Economics Association's 2016 Annual Meeting, San Antonio, February 6 –February 9, 2016.
- Lakkakula, P. (2015). "The United States Sweetener Excise Tax Policy Analysis". Selected paper prepared for presentation at the Southern Agricultural Economics Association's 2015 Annual Meeting, Atlanta, January 31–February 3, 2015.

## Presentations

- 17. Selected paper presentation titled *Impact of Blockchain Technology in International Grain Trading* at the AAEA conference in Atlanta, GA, July 21–23, 2019.
- 16. Selected paper presentation titled *Blockchain Technology in International Commodity Trading* at Research And Practice (RAP) on Blockchain conference in Fargo, ND, October 27, 2018.
- 15. Selected paper presentation titled *The Export/Import Process and Streamlining Trade* at Research And Practice (RAP) on Blockchain conference in Fargo, ND, October 27, 2018.

- 14. Selected paper presentation titled *Time Series Versus Causal Forecasting: An Application of Artificial Neural Networks* at International Conference on Time Series and Forecasting (ITISE2018) in Granada, Spain, September 19–21, 2018.
- 13. Selected paper presentation titled *Optimal Time for Treatment of a Crop Disease: A Real Options Approach* at Agricultural & Applied Economics Association Annual Meeting at Washington, DC, August 5–7, 2018.
- 12. Presented a paper titled Welfare Analysis of Sweetener Trade between the United States and Mexico at the International Agricultural Trade Research Consortium (IATRC) meetings in Washington, DC, December 3-5, 2017.
- 11. Presented a paper titled *Fertilizer Price Analysis* at the 24TH Annual International Moose Jaw Conference, Moose Jaw, Saskatchewan, Canada, June 26–27, 2017.
- 10. Presented a proposal titled *Detection of Leaf and Stem Diseases in Soybeans via Image Analysis and Deep Learning* to the North Dakota Soybean Council, Fargo, ND, June 2017.
- 9. Presented a poster titled Forecasting Market Volumes of Top Categories of Peas and Lentils, at the Institute of Food Technologists (IFT) Conference, Chicago, IL, July 16, 2016.
- 8. Presented Quantifying the Market for Barley in the Ingredient Market along with Dr. Frayne Olson at the U.S. Grain Council in Fargo, ND, 2016.
- 7. Presented US Sweetener Price Forecasting: Implications for Sweetener Market, an accepted paper at Southern Agricultural Economics Association (SAEA) meetings, San Antonio, TX, February 2016.
- 6. Presented an accepted paper at Southern Agricultural Economics Association (SAEA) meetings, Atlanta, GA, February 2015.
- 5. Presented the effects of NAFTA integration on US Sugar Program at the University of Florida to a group of Ph.D. students in the Food and Resource Economics Department, Gainesville, FL. March 2014.
- 4. Presented the economics of pollution control and an overview of effective pollution control policies to a group of undergraduate students at the University of Florida, Gainesville, FL, November 2013.
- 3. Presented a poster on global rice export flows at the Southern Agricultural Economics Association (SAEA) Conference, Corpus Christi, TX, February 2011.
- 2. Presented a poster on global rice trade competitiveness at the Third International Rice Congress (IRC), Hanoi, Vietnam, November 2010.
- 1. Presented US rice export flows using a gravity model of trade at the Rice Technical Working Group (RTWG) Biennial Meeting, Biloxi, MS, February 2010.

Awards

- Received an award [Honorable Mention] for "Sweeteners May Leave a Sour Note on NAFTA Renegotiations" under Outstanding Choices Article category at AAEA Annual Meetings, Washington DC, 2018.
- Received the Grinter Fellowship Award of \$2200 for an outstanding (incoming) Ph.D. student, Gainesville, FL, August 2010 July 2011.

LEADERSHIP

## Vice President, Graduate Student Organization

January 2010 – December 2011

Food and Resource Economics Department University of Florida, Gainesville, FL

#### **Duties**

- Organized orientation session and guided new incoming graduate students in the department
- Communicated the needs and concerns of the graduate students to the Graduate Student Council, Graduate Coordinator, and the department chair

- Served as a liaison between approximately 100 graduate students and the administration of the Food and Resource Economics Department
- Attended monthly graduate student council meetings to elicit and distribute information pertaining to scholarships, travel grants and other issues of interest

SERVICE

- Served as a Chair of the Award Committee in Agribusiness and Applied Economics Department at North Dakota State University, August 2021 Present.
- Volunteered and served as a judge in a poster session organized at university level by Graduate Student Council on Graduate Research Day at the University of Florida, Fall 2014.
- Served on a graduate student panel at the University of Florida to advise and encourage undergraduate students to enroll in Food and Resource Economics program, November, 2011 November, 2012.
- $\bullet$  Participated as a volunteer at  $93^{rd}$  Indian Science Congress Association, January 2007.
- Served as head for a group of 40 other volunteers at National Cadet Corps (NCC) and National Social Service (NSS), ANGRAU, India, August 2007.

Referee

Applied Agricultural Perspectives and Policy, Agricultural Economics, Journal of Agricultural and Resource Economics (JARE), Western Agricultural Economics Association (WAEA) Conference Meetings, Agricultural and Applied Economics Association (AAEA) Conference Meetings, and Journal of International Agricultural Trade and Development.