

Rui Chen

CONTACT INFORMATION

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RESEARCH INTERESTS

Agricultural and Food Economics • Experimental and Behavioral Economics • AI and Machine Learning Applications in Ag and Food Systems • Environmental and Resource Economics • Data-Driven Decision Making and Statistical Modeling

EDUCATION

Ph.D. in Applied Economics (**Minor in Statistics**), Auburn University, Auburn, AL, USA, 12/2017

M.A. in Applied Economics, Ocean University of China, Qingdao, China, 06/2013

B.A. in Applied Economics, Inner Mongolia University, Hohhot, China, 06/2010

PROFESSIONAL EXPERIENCE

Research-Extension Assistant Professor, Tuskegee University, 08/2021-present

- Research: Research in agricultural and experimental economics, with a focus on AI applications in agriculture and food systems. Supervises four Ph.D. students, three master's students, and three postdoctoral researchers. ~13 peer-reviewed journal papers and 28 peer-reviewed conference abstracts to date; secured ≈\$14.2 million in extramural funding as the leading PI (Tuskegee share ≈\$3.7 million). Recipient of two national early-career awards from the Agricultural & Applied Economics Association (AAEA) and the 1890 Universities Foundation.
- Teaching: In addition to standard teaching duties, regularly teaches one to two extra courses per academic year. Co-developed AGSC 501, *Applied Statistics and Machine Learning*—the first applied machine-learning course in CAENS—now required for the inter-college Data Science major. Developed the *Applied Machine Learning* micro-credential program (2024). Earned an online teaching certificate.
- Service: Serves on organizing committees for national professional associations—AAEA, the American Council on Consumer Interests (ACCI), and the North American Bioeconomy Data Alliance (NABDA). Organizes workshops, conference sessions, and exhibit tables (including two pre-conference AAEA Teaching Academy workshops and five workshop sessions at PAWC and the Farmers Conference). Coordinates eight national webinar series annually and mentors three AAEA Teaching Academy mentees. Serves as a judge for student competitions at PAWC and the AAEA Quiz Bowl. Organizes regular meetings with food banks and food pantries.

Instructor, Auburn University, 05/2018-12/2020

Postdoctoral Researcher/Collaborator, Auburn University, 12/2017-12/2020

HONORS AND AWARDS

[1] Gamma Sigma Delta, Tuskegee Chapter, The Honor Society of Agriculture, 2025

[2] **EXCEL Faculty Fellowship**, Walmart Center for Racial Equity, 1890 Universities Foundation, 2023

[3] **Outstanding Young Professional Award**, the Committee on the Opportunities and Status of Blacks in Agricultural Economics (COSBAE) and the Committee on Women in Agricultural Economics (CWAE) of the Agricultural and Applied Economics Association (AAEA), 2022

- [4] *Agricultural & Applied Economics Association (AAEA) Travel Grant (3 times), 2016-2018*
 [5] *Graduate Travel Fellowships, 5 times, Auburn University, 2016-2017*
 [6] *Graduate Student Professional Development Award, Shandong Province, China, 2011*

TEACHING

Department of Agricultural & Environmental Sciences, Tuskegee University, Tuskegee, AL

- [1] Spring 2026
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 41 students
AGSC 501 *Applied Statistics and Machine Learning (Hybrid)*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 8 students
- [2] Fall 2025
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 44 students
- [3] Spring 2025
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 39 students
AGSC 501 *Applied Statistics and Machine Learning (Hybrid)*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 9 students
- [4] Fall 2024
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 28 students
AGEC 501 *Environmental Economics & Economic Planning*; Hours: 3 lecture hours; Enrollment: 4 students
- [5] Spring 2024
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 29 students
AGSC 501 *Applied Statistics and Machine Learning (Hybrid)*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 5 students
- [6] Fall 2023
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 33 students
AGEC 500 *Intro to Agri Economies*; Hours: 3 lecture hours; Enrollment: 3 students
- [7] Spring 2023
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 29 students
AGSC 501 *Applied Statistics and Machine Learning (Hybrid)*; Hours: 2 lecture hours and 2 lab hours; Enrollment: 5 students
AGEC 500: *Intro to Agri Economies*; Hours: 3 lecture hours; Enrollment: 3 students
- [8] Fall 2022
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: ~30 students
- [9] Spring 2022
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: ~30 students
- [10] Fall 2021
EVSC 500 *Biostatistics I*; Hours: 2 lecture hours and 2 lab hours; Enrollment: ~120 students
- Department of Economics, Auburn University, Auburn, AL* 05/2018-12/2020
 ECON 4300 *International Economics*
 ECON 2020 *Principles of Microeconomics*
- Auburn Global, Auburn University, Auburn, AL* 08/2016-12/2020
 ECON 2020 *Principles of Microeconomics*

Curriculum & Program Development

- [1] Developed AGSC 501: *Applied Statistics and Machine Learning*, the first machine-learning course in CAENS; delivered in an inter-campus, inter-college format and now required in the inter-college Data Science major (launched 2023).
- [2] Developed the *Applied Machine Learning Micro-Credential Program*, Tuskegee University, 2024; secured approvals from the Department Head, Dean, Senate Academic Affairs Chair, and Provost/VPA.

PUBLICATIONS

Peer-Reviewed Journal Articles

- [1] Bramantyo, H. A., M. A. Faridi, **R. Chen***, C. Harris and Y. Sun, 2026. "Deep Learning-Based Meat Freshness Detection with Segmentation and OOD-Aware Classification." IEEE Access. DOI: [10.1109/ACCESS.2026.3669074](https://doi.org/10.1109/ACCESS.2026.3669074). [Impact Factor: 3.6](#).
- [2] Braynon, H., Y. Nian, B. Higgins, Y. Diabaté, D. Mortley, and **Chen, R.***, 2026. Cost–Benefit Analysis of Cherry Tomato Production in a Medium-Sized Greenhouse: A Case Study. HortTechnology. DOI: [10.21273/HORTTECH05708-25](https://doi.org/10.21273/HORTTECH05708-25). [Impact Factor: 1.387](#).
- [3] Chen, Y., Li, S., **Chen, R.***, 2025. Impact of Industry and Education Integration on Employment Quality in Higher Vocational Colleges: Moderating Role of Faculty Qualifications and Curriculum Development Capacity. Education Sciences 15, 1316. <https://doi.org/10.3390/educsci15101316>. [Impact Factor: 2.6](#).
- [4] Zhang, A., Danish, **Chen, R.***, 2025. The paradox of artificial intelligence and environmental performance: The critical role of energy transition and institutional quality. Journal of Environmental Management 394, 127330. <https://doi.org/10.1016/j.jenvman.2025.127330>. [Impact Factor: 8.4](#).
- [5] Hartarska, V.*, Nadolnyak, D., **Chen, R.**, 2025. Banking crises and the performance of microfinance institutions. Journal of International Financial Markets, Institutions and Money 102, 102166. <https://doi.org/10.1016/j.intfin.2025.102166>. [Impact Factor: 6.1](#).
- [6] Min, B.R.*, **Chen, R.**, Gurung, N., Solaiman, S., Hilaire, M., Ismael, H., Abdo, H., Chaudhary, S., Abrahamsen, F., 2025. Change Detection in Rumen Fermentation Characteristics and Ruminal Methane Gas Emissions Caused by Substituting Steam-Flaked Corn With Steam-Flaked Wheat Grains in Beef Finishing Diets in Laboratory Conditions. Animal Science Journal 96, e70075. <https://doi.org/10.1111/asj.70075>. [Impact Factor: 1.2](#).
- [7] **Chen, R.**, Su, Y.*, Tran, L., 2024. Small Farmer’s Perceptions of Climate Change and Adoption of Climate-Smart Practices: Evidence from Missouri, USA. Sustainability 16, 9525. <https://doi.org/10.3390/su16219525>. [Impact Factor: 3.3](#).
- [8] **Chen, R.***, Adu, D.T., Li, W., Wilson, N.L.W., 2024. Virtual water trade: Does bilateral tariff matter? Ecological Economics 222, 108216. <https://doi.org/10.1016/j.ecolecon.2024.108216>. [Impact Factor: 6.3](#).
- [9] Ulucak, R., Khan, D, Zhang, Y., **Chen, R.**, Qiu, Y.*, 2024. Income Inequality, Economic Complexity, and Renewable Energy Impacts in Controlling Consumption-Based Carbon Emissions. Evaluation Review 48, 119–142. <https://doi.org/10.1177/0193841X231173766>. [Impact Factor: 3.7](#).
- [10] Min, B.-R.*, Lee, S., Jung, H., Miller, D.N., **Chen, R.**, 2022. Enteric methane emissions and animal performance in dairy and beef cattle production: Strategies, opportunities, and impact of reducing emissions. Animals 12, 948. <https://doi.org/10.3390/ani12080948>. [Impact Factor: 2.7](#).
- [11] **Chen, R.**, Hartarska, V., Wilson, N.L.W.*, 2018. The causal impact of HACCP on seafood imports in the U.S.: An application of difference-in-differences within the gravity model. Food Policy 79, 166–178. <https://doi.org/10.1016/j.foodpol.2018.07.003>. [Impact Factor: 6.0](#).
- [12] Chen, H.*, **Chen, R.**, Bernard, S., Rahman, I., 2019. US hotel industry revenue: an ARDL bounds testing approach. International Journal of Contemporary Hospitality Management 31, 1720–1743. <https://doi.org/10.1108/IJCHM-01-2018-0031>. [Impact Factor: 9.0](#).

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Published Reports and Highlights

- [1] New course featured on Auburn Engineering News. Highlighted co-direction of an Applied Statistics and Machine Learning course with Dr. Yin Sun, emphasizing student hands-on experience with modern AI tools, April 2026 ([Link](#)).
- [2] Research featured on the official social media of the Department of Agriculture, Food and Environment (Di3A), University of Catania, Italy, 2025. ([Link](#))
- [3] Service work featured on the official website of Agricultural & Applied Economics Association (AAEA), 2025. ([Link](#))
- [4] Research and outreach work featured in the USDA/NIFA *AIFAMS 2024 Annual Report*. ([Link](#))
- [5] Research work featured in the Tuskegee University *Division of Research & Sponsored Programs 2023–2024 Annual Report*. ([Link](#))
- [6] Outreach work highlighted in *AAEA President's Column*. ([Link](#))
- [7] Research featured in the Tuskegee University *Division of Research & Sponsored Programs 2022–2023 Annual Report*.
- [8] Research work highlighted in *USDA/NIFA REC 2023 Annual Report*. ([Link](#))
- [9] Research work highlighted in *USDA/NIFA SAS 2023 Annual Report*. ([Link](#))
- [10] Research and education work featured in *Association of 1890 Research Directors (ARD) Updates*, Vol. 14, Issue 12, December 2023. ([Link](#))
- [11] Research work highlighted in local news, 2022. ([Link](#))
- [12] Research work highlighted in local newspaper, 2022.

Under Review/ Revision

- [J1] Cheng, H., **R. Chen***, L. Asare–Baah, M. Li, and Y. Zhang. “Crop Farmers Willingness to Pay for Post-Harvest Technologies in the Southeastern United States.” *Agribusiness*, under review.
- [J2] **Chen, R.***, J. Xu, R. Zabawa, and W. Shi. 2025. “Traditional Financial Service Providers and Social-Demographic Factors Associated with Predatory Lending in Alabama.” *Applied and Economics*, under review.
- [J3] Xu, A., **Chen, R.*** and B. Higgins. “Carbon Reduction and Low-carbon Technologies in Controlled Environment Agriculture: Do Consumers Care?” *Australian Journal of Agricultural and Resource Economics*, under review.
- [J4] Xu, A., **Chen, R.*** “Where You Shop Matters: Consumer Sustainable Choices and Self vs. Altruistic Messaging Across Food Retail Outlets.” *Agricultural Economics*, under review.
- [J5] Yan, F., **Chen, R.***, Wilson, N. Nguyen, L. “The Impact of Regulatory Harmonization on Agricultural Trade.” *Journal of Agricultural Economics*, under review.
- [J6] Baidoo P., **Chen, R.***, Xu, A. “Public Preferences for Forest Ecosystem Services: Evidence from Alabama.” *Journal of Agricultural and Applied Economics*, under review.

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PRESENTATIONS

Invited Presentations

- [P1] **Chen, R.***, & Zabawa, R. “Goal 3: Consumer Preferences for Sustainability Attributes.” *Invited presentation*, 1890 Multi-State Project Meeting, October 2-3, 2025. Atlanta, GA.
- [P2] Varziri, A.*, & **Chen, R.** “Who Buys Low-Carbon Tomatoes? Insights from National Consumer Survey.” *Invited presentation*, USDA–SAS Program—GRACE Project Quarterly Meeting, September 19, 2025. Auburn, AL.

- [P3] **Chen, R.***, Braynon, H., Nian, Y., Higgins, B., Diabate, Y., Mortley, D. “Cost-benefit analysis of cherry tomato production in greenhouses.” *Invited presentation*, USDA–SAS Program—GRACE Project Quarterly Meeting, June 30, 2025 (virtual).
- [P4] **Chen, R.***. “Consumer Preferences for Sustainability Attributes and AI Applications in Food and Agriculture.” *Invited seminar*, University of Catania, Catania CT, Italy, June 26, 2025. ([Link](#)).
- [P5] Xu, A.* & **Chen, R.** “Consumers’ Willingness to Pay for Low Carbon Cherry Tomatoes.” *Invited presentation*, Green-Reimagining of Agriculture in Controlled Environments (GRACE) Annual Symposium, March 27-28, 2025. Gainesville, FL.
- [P6] Xu, A.* & **Chen, R.** “Information Effects on Sustainable Consumer Choices: Self-Interest vs. Altruism.” *Invited presentation*, Green- Reimagining of Agriculture in Controlled Environments (GRACE) Annual Symposium, March 27-28, 2025. Gainesville, FL.
- [P7] Braynon, H. & **Chen, R.***. “Cost-Benefit Analysis on Cherry Tomato Production in Greenhouses.” *Invited presentation*, Green-Reimagining of Agriculture in Controlled Environments (GRACE) Annual Symposium, March 27-28, 2025. Gainesville, FL.
- [P8] **Chen, R.***. “Strengthening Workforce Development through Micro-Credential Certification.” *Invited presentation*, EXCEL Faculty Fellows Program, 1890 Center of Excellence for Student Success and Workforce Development (SSWD) Final presentations/report, December 9, 2024 (virtual).
- [P9] **Chen, R.*** & Sun, Y. “Meat Goat Grading with AI.” *Invited presentation*, Artificial Intelligence for Future Agricultural Resilience, Management, and Sustainability (AIFARMS) Annual Conference-Advisory Board, October 1-3, 2024. Olivette, MO.
- [P10] **Xu, A.*** & **Chen, R.** “Consumer Attitudes to Sustainable Cherry Tomatoes.” *Invited presentation*, USDA SAS Project Quarterly Investigators Meeting, September 6, 2024. Auburn, AL.
- [P11] **Chen, R.***. “Advancing Food Security and Nutrition through Machine Learning–Based Forecasting and Interventions for Food Pantries in Alabama.” *Invited presentation*, USDA–NIFA AFRI Project Directors Meeting, Agricultural Economics & Rural Communities Programs, AAEA Post-Conference Workshop, New Orleans, LA, July 31, 2024. ([Link](#))
- [P12] **Chen, R.***, Clarissa, H., Sun, Y., Li, M. “Strengthening HBCU Student Success through Data Science and Machine Learning Experimental Education in FANH.” *Invited Presentation*, 1890 Center of Excellence for Student Success and Workforce Development (SSWD) 3rd Annual Symposium, May 20-22, 2024. Tuskegee, AL.
- [P13] **Chen, R.*** & Xu, A. “Low-carbon Technologies in Greenhouse Tomato Production: Do Consumers Care?” *Invited presentation*, Green-Reimagining of Agriculture in controlled Environments (GRACE) Annual Symposium, March 14-15, 2024. Auburn, AL.
- [P14] Myles, K.* & **Chen, R.** “Assessing the Interactions between Food Pantries, Poverty, and Food Insecurity in Alabama: A Geospatial Analysis.” *Invited presentation*. Research and Extension Experiences for Undergraduates (REEU)/Research Experiences for Undergraduates (REU)/National Bio and Agro Defense Facility (NBADF) Summer Training Programs Final Poster Presentation, July 28, 2023. Tuskegee, AL.
- [P15] Bapatla, S.*, **Chen, R.**, Sun, Y. “Image Classification of Fruits and Vegetables for Tracking Food Pantry Inventory.” *Invited presentation*. Research and Extension Experiences for Undergraduates (REEU)/Research Experiences for Undergraduates (REU)/National Bio and Agro Defense Facility (NBADF) Summer Training Programs Final Poster Presentation, July 28, 2023. Tuskegee, AL.
- [P16] **Chen, R.***, Y., Sun, C., Harris, Shisher, M. “Mobile AI-Based Goat Meat Grading for Social Disadvantaged Producers in Alabama.” *Invited presentation*, Goat Day. Apr 22, 2023. Tuskegee, AL.

*Presenter

Conference Presentations (Abstract Peer-Reviewed)

- [C1] **Chen, R***, Varziri, A., **Baidoo, P.**, Sun Y. “AI-Enabled Goat Meat Grading: Do Consumers Care?” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 26-28, 2026. Kansas City, MO (Scheduled).
- [C2] Xu, A., **Chen, R***. “Transparency in Action: How Intrusiveness Levels Influence Consumer Perceptions of Sustainable Food Technologies” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 26-28, 2026. Kansas City, MO (Scheduled).
- [C3] **Chen, R. ***, A. Xu. “Does Consumer Care Low-carbon Technologies? Evidence from Willingness to Pay for Low-Carbon Cherry Tomatoes Across Technologies and Retail Outlets.” 1890 Association of Research Directors (ARD) Research Symposium, March 28-31, 2024. New Orleans, LA.
- [C4] Varziri, A. **Chen, R. ***, “Alan, Xo. Who Values Carbon Reduction? Evidence from Consumer Segmentation in Greenhouse Cherry Tomato Markets.” 1890 Association of Research Directors (ARD) Research Symposium, March 28-31, 2024. New Orleans, LA.
- [C5] Li, M., **Chen, R. *** “The Impact of Farm-to-Food-Bank Programs on Farms’ Postharvest Losses in the Southeastern U.S. M.” 1890 Association of Research Directors (ARD) Research Symposium, March 28-31, 2024. New Orleans, LA.
- [C6] Xu, A.*, **R., Chen.** “Where You Shop Matters: Consumer Sustainable Choices and Self vs. Altruistic Messaging Across Food Retail Outlets.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C7] **Chen, R.***, Braynon, H., Nian, Y., Higgins, B., Diabate, Y., Mortley, D. “Cost-Benefit Analysis of Cherry Tomato Production in a Medium-Sized Greenhouse: A Case Study.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C8] **Chen, R.***, & Li, S. “Adaptive Two-Dimensional Information Diffusion Models for Agricultural Income Risk Prediction: Joint Optimization of Diffusion Points and Bandwidths.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C9] Li, M.*, **Chen, R.**, Asare-Baah, L., Sun, Y., & Zhang, Y. “Determinants of Post-Harvest Losses in the Southern U.S.: An Ordered Logit Regression Analysis.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C10] Baidoo, P*. & **Chen, R.**, & Xu, A. “Public Preferences for Forest Ecosystem Services: Evidence from Alabama.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C11] Baidoo, P*. & **Chen, R.**, & Xu, A. “Framing Prescribed Fire in Forest Management: Evidence from a Discrete Choice Experiment.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C12] Varziri, A.*, Xu, A., **Chen, R.** “Framing Sustainability: Consumer Responses to Carbon, Intrusiveness, and Technology Attributes in Greenhouse Cherry Tomatoes.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.
- [C13] Primos, N.*, **Chen, R.**, Xu, A. “Regional Differences in Climate Change Perceptions and Their Role in Valuing Sustainable Agriculture Products in the U.S.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 1-3, 2026. Louisville, KY.

- [C14] **Chen, R.***, & Xu, A. “Carbon Reduction and Low-carbon Technologies in Controlled Environment Agriculture: Do Consumers Care?” Southern Economic Association (SEA) Annual Meeting. November 22-24, 2025. Tampa, FL.
- [C15] Li, M.*, **Chen, R.**, & Sun, Y. “Data-Driven Food Demand Forecasting at Food Pantries in Alabama.” Southern Economic Association (SEA) Annual Meeting. November 22-24, 2025. Tampa, FL.
- [C16] Nyarkoh, G.*, & **Chen, R.** “Cost-benefit analysis of greenhouse lettuce production: a case study.” 83rd Professional Agriculture Workers Conference (PAWC). November 22-24, 2025. Montgomery, AL.
- [C17] **Chen, R.***, & Li, S. “Regulatory Environment, Market Structure, and Agricultural Insurance Development: Evidence from a Panel Threshold Regression Model.” 83rd Professional Agriculture Workers Conference (PAWC). November 22-24, 2025. Montgomery, AL.
- [C18] Varziri, A.* & **Chen, R.** “Consumer Segments of Low-Carbon Greenhouse Tomatoes.” 83rd Professional Agriculture Workers Conference (PAWC). November 22-24, 2025. Montgomery, AL.
- [C19] **Chen, R.*** N. Zuo, Penn, J. “Black Left Behind: Bridging Racial Disparities in Data Science and Artificial Intelligence through Micro-Credential Certification.” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 27-29, 2025. Denver, CO. (Virtual) [[Link](#)]
- [C20] Braynon, H. & **Chen, R.***, Nian, Y. “Cost-Benefit Analysis of Tomato Production Using Greenhouses in Florida.” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 27-29, 2025. Denver, CO. (Virtual). [[Link](#)]
- [C21] Li, M.*, **Chen, R.** & Sun, Y. “Common Factor Augmented Food Demand Forecasting for Alabama Food Pantry.” 82nd Professional Agricultural Workers Conference (PAWC), November 17–19, 2024. Montgomery, AL. [[Link](#)]
- [C22] B.R. Min*, H. H. Wang, A. Kumi, **R. Chen**, S. Chaudhary, V. Kanyi, I. Min, U. Kim, J. Lee, and I. Ha, N. Gurung, H. Abdo, and H. Ismael. “Effects of Post-Biotic Supplementation on Animal Performance, Immune Responses, and Blood Metabolites in Pre-Weaning Dairy Calves.” 82nd Professional Agricultural Workers Conference (PAWC), November 17–19, 2024. Montgomery, AL. [[Link](#)]
- [C23] Xu Y.*, & **Chen, R.** “Low-carbon Technologies in Greenhouse Tomato Production: Do Consumers Care?” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 28- 30, 2024. New Orleans, LA.
- [C24] Baidoo, P*. & **Chen, R.** “Valuing Forest Ecosystem Services: Public Preferences and Willingness to Pay for Forest Ecosystem Services in Alabama.” 1890 Association of Research Directors (ARD) Research Symposium, April 6-9, 2024. Nashville, TN.
- [C25] Braynon, H*. & **Chen, R.** “Cost-Benefit and CO₂ Reduction Efficiency Analysis on Tomato Production Using Low-Carbon Technologies.” 1890 Association of Research Directors (ARD) Research Symposium, April 6-9, 2024. Nashville, TN.
- [C26] Cheng, H., **R., Chen***, L., Asare–Baah, M., Li, Zhang, Y. “Crop Farmers Willingness to Pay for Post-Harvest technologies in the Southeastern United States.” Southern Agricultural Economics Association (SAEA) Annual Meeting, February 3-6, 2024. Atlanta, GA. [[Link](#)]
- [C27] Peterson, C. S.*, J. Quansah, **R. Chen**, A. Green-Miller, and O. Bolden-Tiller. “Understanding Estrus Behaviors in Housed Does Using Computer-Based Tracking Technology.” 81st Professional Agriculture Workers Conference (PAWC). October 29–31, 2023. Montgomery, AL. [[Link](#)]
- [C28] Gutierrez D., S. *, J. Quansah, **R. Chen**, and S. Fall. “Literature Review: Status of Micro-Credentials as a Means for Professional Advancement for Minority Groups.” 81st

Professional Agriculture Workers Conference (PAWC). October 29–31, 2023. Montgomery, AL. [\[Link\]](#)

- [C29] Bapatla, S.*, **Chen, R.**, Sun, Y. “Image Classification of Fruits and Vegetables for Tracking Food Pantry Inventory.” Artificial Intelligence for Future Agricultural Resilience, Management, and Sustainability (AIFARMS) Annual Conference, September 7, 2023. Champaign, IL.
- [C30] **Chen, R.** & Y., Su*, L., Tran. “Producer Perceptions of Climate Change and Their Willingness to Adopt Climate-smart Practice: A Case in Missouri.” Southern Agricultural Economics Association (SAEA) Annual Meeting, January 2023. Oklahoma City, OK.
- [C31] **Chen, R.***, Shisher, M. K. C., Orrison, T., Sun, Y. “Demand Forecasting at Alabama Food Pantries Using Machine Learning Methods.” Southern Economic Association (SEA) Annual Meeting, January 2023. Oklahoma City, OK.
- [C32] **Chen, R.*** & Zabawa, R. “Traditional financial service providers and social-demographic factors associated with predatory lending in Alabama.” Southern Economic Association (SEA) Annual Meeting, November 19-21, 2022. Fort Lauderdale, FL.
- [C33] **Chen, R.*** “Why Should We Pay More Attention to Small Farms versus Big Cotton Farms in Alabama?” 80th Professional Agriculture Workers Conference (PAWC). November 13-15, 2022. Montgomery, AL. [\[Link\]](#)
- [C34] **Chen, R.***, Orrison, T., Shisher, M. K. C., Sun, Y. “Demand Forecasting at Alabama Food Pantries Using Machine Learning Methods.” 80th Professional Agriculture Workers Conference (PAWC). November 13-15, 2022. Montgomery, AL. [\[Link\]](#)
- [C35] **Chen, R.*** D. Fang and Hartarska, V. “The Impact of the Affordable Care Act Dependent Coverage Expansion on Young Adults’ Income, Health Care Utilization and Expenditure” 1890 Association of Research Directors (ARD) Research Symposium, April 2-5, 2022. Atlanta, GA.
- [C36] **Chen, R.*** & Dokes, T. “Economic Impact Assessment and Management of Feral Hog Damages on Small, Socially, and Economically Disadvantaged Farmers.” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 31-August 2, 2022. Anaheim, CA. [\[Link\]](#)
- [C37] Hartarska, V.*, **Chen, R.**, Nadolnyak, D. “Banking crises and the performance of microfinance institutions.” European Financial Management (EFMA) Annual Meeting, June 29-July 2, 2022. Rome, Italy. [\[Link\]](#)
- [C38] **Chen, R.***, Fang, D., Hartarska, V. The Affordable Care Act: Does the ACA Dependent Coverage Mandate Mean Less Out-of-pocket Health Care Expenditure and Health Care Utilization? Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 31-August 2, 2019. Atlanta, GA.
- [C39] **Chen, R.*** “The Impact of Regulatory Similarity on Seafood Trade.” Agricultural & Applied Economics Association (AAEA) Annual Meeting, July 30- August 1, 2017. Chicago, IL.
- [C40] **Chen, R.*** & Wilson, N.L. “Virtual Water trade: Does Bilateral Tariff Matter?” Agricultural & Applied Economics Association Annual Meeting, July 30-August 1, 2017. Chicago, Illinois. [\[Link\]](#)

*Presenter

GRANTS

Total awards: ≈\$14.2M (Tuskegee share: ≈\$3.7M; **Role:** PI/PD)

- [G1] Steering Committee Member (Co-Chair: Na Zuo, UA & Jason Bergtold, KSU), “AAEA Teaching Academy: Opportunities to Improve Pedagogy and Teaching in Agricultural Economics and Agribusiness,” Agricultural and Applied Economics Association (AAEA) Trust Committee and AAEA Board: 01/2024-01/2025, \$20,000

- [G2] Co-PI, “Addressing Environmental Justice Issues and Assessing Economic Impacts of Drought on Agriculture for Underserved Communities,” Alabama University/USGS: 07/2023 - 06/2025, \$583,659.
- [G3] Co-PI, “Strengthening Institutional Procurement: Lessons from LFPA,” USDA AMS/COOPS: 09/2023 - 09/2025, \$290,000 (Tuskegee portion: Approx. \$39,636).
- [G4] PI (Collaborative PI: Angela Green-Miller, UIUC), “Partnership: Decision Support for Management of the Swine Breeding Herd Through an Extensible Web and IoT Platform,” USDA/NIFA/AFRI: 2025 - 2027, \$760,000 (Tuskegee portion: Approx. \$137,717). Awarded.
- [G5] PI (Collaborative PI: Ye Su, LU), “Assessing Opportunities and Challenges of the Small Ruminant Industry: Consumer Preferences, Market Trends, and Potential Economic Impacts,” USDA/NIFA/AFRI:10/2023 – 09/2026, \$300,000 (Tuskegee portion: Approx. \$30,470).
- [G6] Co-PI, “Improved Practices of Climate-Smart Livestock Production Systems and Agricultural Commodities while Enhancing Carbon Sequestration in the Southern USA: Innovating toward a new climate-smart commodity by investing in minority producers” USDA/Climate Smart Commodities: 08/2023-08/2027, \$4,081,100.
- [G7] PI, “Advancing Food Security and Nutrition through Machine Learning-based Forecasting and Interventions for Food Pantries in Alabama,” USDA/NIFA/AFRI: 06/2023-05/2027, \$650,000.
- [G8] PI (Collaborative PI: Brendan Higgins, AU), “Reimagining controlled environment agriculture -03/2027, Approx. \$10,000,000 (Tuskegee portion: Approx. \$1,900,000). in a low carbon world,” USDA AFRI Sustainable Agricultural Systems (SAS): 2022-07526, 04/2023
- [G9] Faculty Recipient. “Assessing Educational Attainment Gap in Data Analytics and AI for African Americans and Underserved Communities: Strengthening Workforce Development through Micro-Credential Certification.” Walmart EXCEL Faculty Fellowship Program, USDA Student Success and Workforce Development (SSWD) Center of Excellence: 2023-2024, \$190,000.
- [G10] PI, “Post-harvest Loss Reduction of Small Farmers and Ranchers for Profitability, Food, and Nutrition Security in Alabama,” Socially Disadvantaged Farmers and Ranchers Policy Research Center (Policy Center): 01/2023-12/2023, \$75,000.
- [G11] PI, “Strengthening HBCU Student Success through Data Science and Machine Learning Experimental Education in FANH,” 1890 Land Grant Universities Center of Excellence: 02/2023- 09/2024, \$40,000.
- [G12] PI, “Advancing Sustainability and Profitability for Small-Scale Under-represented Minority Forestry Landowners,” USDA NIFA McIntire-Stennis Cooperative Forestry Research Program: ALX-SRS22, 12/2022 - 01/2027, app. \$650,000.
- [G13] Co-PI, “Farm Workers’ Mental Health: What Role for the Farm Economy and Resources from the Broader Community”, SCAHIP Pilot Studies Program: 10/2020-9/2021, \$15,000.
- [G14] PI, “Distance Education Course Development Grant,” Auburn University: 05/2020, \$2,000.
- [G15] Co-PI, “Farmers' Accidental Deaths and Suicides: Contributing Factors and Effective Prevention,” SCAHIP Pilot Studies Program: 10/2019-9/2020, \$12,088.69.

SUPERVISION & MENTORING

Postdoctoral Researchers (completed)

Dr. Azita Varziri (2025-2026): Now Director of Marketing Development at Pharmacy company

Dr. Yilan Xu (12/2023-07/2025): Now Assistant Professor of Agricultural Economics, Fort Hays State University, USA

Dr. Recep Ulucak (09/2023-07/2024): Now Professor of Environmental Economics and Head of Department, Erciyes University, Turkey

Visiting Scholar

Prof. Shisen Li 09/2025-present

Ph.D. Students (Primary Advisor)

Mengxue Li 08/2023-present

Fuzhen Yan 08/2024-present

Neema Primos 08/2024-present

Priscilla Baidoo 08/2025-present

Master's Students

Gideon Nyarkoh 08/2025-present

Hali Braynon 08/2023-05/2025

Priscilla Baidoo 01/2023-07/2025

Undergraduate Students

Victoria Glover 08/2024-05/2025

Atiya Salam 01/2024-05/2024

AAEA Teaching Academy Mentees

Vikas Mishra (Postdoctoral researcher at Auburn University) 11/2025-present

Omowunmi Odeyomi (Ph.D. student at North Carolina A&T State Uni) 10/2024-present

Ph.D. Committee Member

Shirley F. Brown 11/2025- present

Caryn Barnes 04/2025-present

Obianuju Egiebor 10/2023-present

Vanessa Njoku 11/2023-05/2025

Folashade Adalumo 10/2022-05/2023

Cathy Keeler 03/2022-08/2022

Master's Committee Co-chair

Adia Stokes 01/2023-05/2023

Master's Committee Member

Christian Peterson 09/2022-05/2024

Berson J. Valcin 09/2022-12/2022

Former Students

REEU & REEU Undergraduate Students

Suchit Bapatla (UIUC student) 05/2023-08/2023

Kobe Myles (Alcorn State University student) 05/2023-08/2023

PROFESSIONAL ACTIVITIES AND SERVICES

Journal and Conference Reviewer

Applied Economics Teaching Resources (AETR)

Agricultural Finance Review

Agricultural Economics

International Journal of Contemporary Hospitality Management

International Food and Agribusiness Management Review

Agricultural & Applied Economics Association (AAEA) Annual Meeting

Proposal Reviewer

- [1] Served on peer-review panel, USDA–NIFA–AFRI Economics, Markets, and Trade (A1641), 2024
- [2] Served on peer-review panel, USDA–NIFA Specialty Crop Research Initiative (SCRI) Program, 2023
- [3] Served on peer-review panel, Southern Sustainable Agriculture Research & Education (Southern SARE) Graduate Student Grants, 2022

Steering Committee Member

- [1] Topic Leader, Household & Labor Economics — Agricultural & Applied Economics Association (AAEA) Annual Meeting, 2026 (scheduled)
- [2] Served on Organizing Steering Committee, Agricultural & Applied Economics Association (AAEA) Teaching Academy, 2023-present [[Link](#)]
- [3] Served on Travel Scholarship peer-review panel, Agricultural & Applied Economics Association (AAEA) Teaching Academy, 2024 - present.
- [4] Served as Mentor, Agricultural & Applied Economics Association (AAEA) Teaching Academy, 2024-present
- [5] Served on Steering Committee, North American Bioeconomy Data Alliance (NABDA), 2024-present
- [6] Served as Agricultural economist on AI Institute for Future Agricultural Resilience, Management, and Sustainability (AIFARMS), 2022-present [[Link](#)]
- [7] Served on Planning Team AIFARMS Hackathon 2025 [[Link](#)]
- [8] Served on MarCom Committee, American Council on Consumer Interests (ACCI), 2023-2024
- [9] Served on 80th Annual Professional Agriculture Workers Conference (PAWC) local planning meeting, 2022. [[Link](#)]

Certificate

Research

- [1] Participated in Goat Seminar, Oct 29, 2025
- [2] Certificate of Completion for International Workshop for Survey Design and Experimental Methods, May 2024.
- [3] Certificate of Completion of CITI Human Subjects Research (Social & Behavioral), Jan 12, 2022

Teaching

- [1] Certificate of Completion of the Course Cybersecurity, Sep 9, 2025
- [2] Digital Badge of Completion for TU Ethics Training, Nov 3, 2025
- [3] Certificate of Completion of course "Federal Educational Rights Privacy Act (FERPA) 101: Protecting Student Records & Privacy," July 24, 2024
- [4] Certificate of Completion for Faculty Online Teaching Certificate Course, Office of Distance Education and Online Learning, Tuskegee University, Dec 3, 2021.

Service

- [1] Certificate of Appreciation for serving as a mentor in AAEA Teaching Academy, 2024-2025.
- [2] Completed USDA Grant Review Panel Training supporting effective service as a federal proposal review panelist, 2023 & 2024
- [3] Participated in the Faculty Promotion and Tenure Webinars, Oct 30, 2025
- [4] Participated in Tuskegee University conference and subsection meetings, 2021-present
- [5] AREC Faculty Meetings, 2022-present
- [6] Certificate of Achievement Kevin Mitnick Security Awareness Training, Aug 5, 2021

WORKSHOP AND OUTREACH ACTIVITIES

- [1] Organized one workshop session “From Systems to Sustainability: Hydroponic Vegetable Production and Profitability” at 83rd Annual Professional Agriculture Workers Conference (PAWC), 2025. (Scheduled).
- [2] Organized one AIFARMS workshop session “Digital Technologies and Machine Learning Applications in Agriculture and Food Systems” at 83rd Annual Professional Agriculture Workers Conference (PAWC), 2025. (Scheduled).
- [3] Judge for GSD Student Competition at 83rd Professional Agricultural Workers Conference (PAWC), November 16, 2025. (Scheduled).
- [4] Organized 2 workshop sessions “From Farm to Food Bank: Empowering Rural Prosperity and Food Security” at 133rd Farmers Conference, 2025.
- [5] Established partnerships with six local pantries and three food banks, enabling Alabama’s emergency food assistance program to apply ML/AI in practice.
- [6] Led students from the “Applied Statistics and Machine Learning” course from Tuskegee University and Auburn University to attend the Goat Day event for an experiential learning field trip on April 12, 2025.
- [7] Hosted on Exhibit Table on sheep and goat marketing channels at the 2025 Farmers Conference & the 2025 Goat Day.
- [8] Participated in Global Conference-2024 Ag Education Delegation to China as Tuskegee representative, June 2024.
- [9] Organized one AI Institute for Future Agricultural Resilience, Management, and Sustainability (AIFARM) workshop session “Empowering Agriculture with Artificial Intelligence: Data Collection, Ownership, and Profitability Through Innovation” at 82nd Annual Professional Agriculture Workers Conference (PAWC), 2024. ([Link](#)).
- [10] Led students from the “Applied Statistics and Machine Learning” course from Tuskegee University and Auburn University to attend the Goat Day event for an experiential learning field trip on April 20, 2024.
- [11] Led students from the “Applied Statistics and Machine Learning” course from Tuskegee University and Auburn University to visit the Auburn United Methodist Church food pantry for an experiential learning field trip on February 2, 2024.
- [12] Mentored a UIUC undergraduate student, Suchit Bapatla from Tuskegee University’s Research and Extension Experiences for Undergraduates (REEU)/Research Experiences for Undergraduates (REU)/National Bio and Agro Defense Facility (NBADF) Summer Training Programs, June 2023 - July 2023.
- [13] Mentored an Alcorn State University student, Kobe Myles from Tuskegee University’s Research and Extension Experiences for Undergraduates (REEU)/Research Experiences for Undergraduates (REU)/National Bio and Agro Defense Facility (NBADF) Summer Training Programs, June 2023 - July 2023.
- [14] Hosted an Exhibit Table on post-harvest loss at 2023 Professional Agriculture Workers Conference (PAWC), 2023 & 2024 Farmer Conference.
- [15] Hosted Exhibit Table on post-harvest loss at 2023 Alabama Farmers Federation Annual Meeting.
- [16] Hosted an Exhibit Table on post-harvest loss at National Black Growers Council (NBGC) Annual Meeting, December 12-15, 2023.
- [17] Hosted an Exhibit Table on post-harvest loss at 56th Annual Meeting by the Federation of Southern Cooperatives, Aug 2023.
- [18] Served as a Judge & Expert for Alabama Youth Institute — Evaluated high school students’ presentations, June 17, 2022.
- [19] Co-organized the **AIFARM** workshop session “Role of Robots in Addressing Agricultural Challenges” at 80th Professional Agricultural Worker Conference (PAWC), 2022. ([Link](#))

[20] Food distribution volunteer at local food banks and food pantries, 2021-present

PROFESSIONAL AFFILIATIONS

Agricultural & Applied Economics Association (AAEA)

[Agricultural & Applied Economics Association \(AAEA\) Teaching Academy](#)

Agricultural Economics Society (AES)

European Association of Agricultural Economists (EAAE)

[Artificial Intelligence for Future Agricultural Resilience, Management, and Sustainability \(AIFARMS\)](#)

American Council on Consumer Interests (ACCI)

Southern Economic Association (SEA)

Southern Agricultural Economics Association (SAEA)

International Society for Ecological Economics (ISEE)

American Society of Health Economists (ASHEcon)

Chinese Economists Society (CES)

American Economic Association (AEA)

International Agricultural Trade Research Consortium (IATRC)

COMPUTER SKILLS

Stata, R, SAS, EViews, ArcGIS, Python, Ngene, NLOGIT

PERSONAL INFORMATION

Status: Permanent Resident (Green Card Holder)

Languages: English, Chinese