Dinesh R Poddaturi

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EDUCATION

Iowa State University (ISU), Ames, IA   **Aug 2018–May 2023**
Doctor of Philosophy, Ph.D., Economics
Fields: Agricultural Economics, Industrial Organization, Econometrics, Mathematical and Quantitative Methods, Environmental Economics

Iowa State University, Ames, IA   **Aug 2016–May 2018**
Master of Science, M.S., Statistics

Iowa State University, Ames, IA   **Jan 2014–May 2016**
Master of Science, M.S., Information Systems

CVR College of Engineering, Hyderabad, India   **Aug 2007–Jun 2011**
Bachelor of Technology, B.Tech., Electronics and Communication Engineering

WORKING PAPERS

- Dinesh R Poddaturi, Chad E Hart, Lee L Schulz. A Dynamic Model of U.S. Beef Cattle
- Dinesh R Poddaturi, Chad E Hart, Lee L Schulz. A Dynamic Assessment of the Economic Impacts of a Foot-and-Mouth Disease Outbreak on the U.S. Beef Cattle Industry
- Dinesh R Poddaturi, Chad E Hart, Lee L Schulz. Implementing a National Animal Identification and Traceability Program: Economic Assessment using a Dynamic Model of U.S. Beef Cattle

PRESENTATIONS

- Western Agricultural Economics Association – Santa Fe, NM, June 2022
- Agricultural & Applied Economics Association – Austin, TX, August 2021
- Agricultural & Applied Economics Association – Virtual, August 2020

REPORTS AND PUBLICATIONS

- Dinesh R Poddaturi, Garland Dahlke, Russ Euken, Lee Schulz. 2018. Development of a CRUSH Margin Calculator for Beef and Pork Markets. Iowa State University Animal Industry Report. ASL R3221
- Dahlke, G., D. R. Poddaturi, D. Loy. 2017. ISU Beef Feedlot Monitor version 3. Iowa State University Beef Center. AS 13A.
- Dahlke, G., and D. R. Poddaturi. 2017. ISU Sheep Feedlot Monitor. Iowa State University Beef Center. AS 7
- Dinesh R Poddaturi, Garland Dahlke, Sandy Johnson. 2016. Management Minder—A Web Based Data Management Application (Concept). Iowa State University Animal Industry Report. ASL R3052
- Dinesh R Poddaturi, Garland Dahlke, Sandy Johnson. 2016. Management Minder—A Web Based Data Management Application (Technical Details). Iowa State University Animal Industry Report. ASL R3051
- Poddaturi, D., S. Johnson, G.R. Dahlke, D. A. Blasi, and G. Hanzlicek. 2016. 0586 Development of a web-based calendar tool for scheduling beef cow management activities. J. Anim. Sci. 94(Suppl5):277-278. doi:10.2527/jam2016-0586

PROFESSIONAL EXPERIENCE

Graduate Research Assistant   **Aug 2018–Jul 2022**
Department of Economics, ISU, Ames, IA
- Conceptualized a data-driven economic model for the beef cattle industry consistent with economic theory
- Solved model by developing algorithms in R with advanced quantitative methods and 14 unique data sets
- Projected production and prices into the future with higher precision
- Translated economic evidence-based findings into a comprehensible narrative to communicate policy, resulting in 3 presentations at professional conferences
- Utilized visualizations to document, inform critical processes, and plot the solutions and projections

Graduate Research Assistant   **May 2014–Jul 2018**
Iowa Beef Center, ISU, Ames, IA
- Developed 2 novel web-based software products, which are currently used by ~1000 users in the United States and 9 other countries
- Reviewed code, debugged problems, and resolved issues which enhanced product performance by ~15%
- Recommended statistical methods and designed experiments for researchers that improved their analysis

Graduate Research Assistant   **Aug 2014–May 2018**
Department of Agronomy, ISU, Ames, IA
- Examined printing records data and presented ideal solutions to the stakeholders, that influenced their decision
- Collaborated with upper management to gather, analyze, and define requirements
- Integrated databases and backup servers into an enterprise system

Systems Engineer, Business Platforms   **Mar 2012–Dec 2013**
Infosys Limited, Hyderabad, India
- Analyzed critical aspects of the business to evaluate factors driving results, presented them to the senior management, and secured funding
- Led and coached a team of 6 trainees to create an online banking software product
- Integrated and deployed various Enterprise and Cloud-based products into production
- Configured, installed, and scripted SQL databases

SKILLS

Technical Skills: Economic and Statistical Modeling, Applied Econometrics, Data Science, Quantitative Methods, Causal Inference, Computational Economics, Interactive Data Visualization, Time Series Forecasting, A/B Testing, Predictive Modeling, Algorithm Development, Sentiment Analysis, Natural Language Processing, Experiment Design
Programming Skills: R, SQL, JAVA, RDBMS
Tools: RStudio, MySQL, Git, RShiny, LaTeX, Markdown, Eclipse

PROJECTS

Socioeconomic Indicators - United States

- Examined several key indicators related to poverty, education, unemployment rate, and population distribution in the United States through interactive data visualization
- Demonstrated advanced data cleaning techniques and interactive visualization app development skills by developing a shiny app, which is available at Socioeconomic Indicators - United States - Shiny App

Name the Price: Analysis and Prediction of House Prices with Machine Learning

- Applied several statistical learning methods to examine and predict house prices from house demographics
- Built machine learning models using GBM, XGBoost, Random Forest, Neural Networks, kNN, and ensembles to improve the prediction

Natural Language Processing and Sentiment Analysis

- Extracted original Twitter data and employed several NLP techniques to process and analyze the sentiment of the economy
- Discovered the sentiment towards recession is on average negative 0.28 and illustrated the distribution of sentiment with visualizations

LEADERSHIP AND SERVICE

Treasurer – Economics Graduate Student Association   **Aug 2020–Jul 2021**
Iowa State University, Ames, IA

- Organized events to welcome 14 incoming PhD students
- Advised and suggested strategies for ~20 PhD students taking qualifying exams

Webmaster – Iowa State University Student Government   **Mar 2014–Jan 2015**
Iowa State University, Ames, IA

- Communicated and contributed to weekly meetings with the cabinet and made suggestions to improve the student experience at the university
- Created and distributed surveys to undergraduate students to gain insights on their concerns and suggestions

Disaster Recovery Representative, Infosys Limited, India   **Aug 2012–Dec 2013**

- Assisted and created a safe environment for under-represented groups in the workplace
- Skilled in taking quick and safe actions in the event of a fire, flood, or any unforeseen events at the workplace