Dinesh R Poddaturi

Ames, IA | dineshreddypoddaturi@gmail.com | 252-378-0710

linkedin.com/in/dinesh-r-poddaturi/ | github.com/DineshPoddaturi | dineshpoddaturi.github.io

EDUCATION

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

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–Present**
Department of Economics, ISU, Ames, IA

- Conceptualized a data-driven economic model for the beef cattle industry consistent with economic theory
- Solved the economic 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
- Led 2 empirical studies by developing algorithms, generated 8 unique data sets, and articulated economic results to a wide audience at 3 professional conferences
- Supported the Center for Agricultural and Rural Development (CARD) IT team by updating databases and debugging the back-end code

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%
- Designed experiments and recommended statistical methods 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
- Analyzed google analytics data, determined metrics, and recommended resolutions

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, Policy Analysis, Interactive Data Visualization, Time Series Forecasting, Predictive Modeling, Algorithm Development, Sentiment Analysis, Natural Language Processing, Experimental Design

Programming Skills: R, SQL, JAVA, RDBMS

Tools: RStudio, Eclipse, MySQL, Git, RShiny, LaTeX, Markdown

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

REFERENCES

Lee Schulz
Associate Professor
Department of Economics
Iowa State University
lschulz@iastate.edu
(515) 294-3356

Chad Hart
Professor
Department of Economics
Iowa State University
chart@iastate.edu
(515) 294-9911

John Crespi
Professor and Director of CARD
Department of Economics
Iowa State University
jcrespi@iastate.edu
(515) 294-1699