Collin DeVore

collindevore@gmail.com
collin-devore.github.io

Research Interests

Effects of Regulation/Deregulation on Market Power
Applied Microeconomic Theory
Game Theory
Industrial Economics

Education

Master's of Science in Economics, 2019 – University of Texas at Dallas
Bachelor's of Science in Economics, 2017 – Oklahoma State University

Professional Experience

October 2019 – Current
Position: Senior Clinical Analyst at Lockton – Dunning Benefits
Description: Cleaned, manipulated, and entered data into the Lockton database using Microsoft Excel. Provided forecasts of health information to the Lockton team.

August 2017 – May 2019
Position: Teaching Assistant at University of Texas at Dallas
Courses: Environmental Economics, International Trade, and Game Theory
Description: Graded students' papers, tutored students, proctored exams, and ran general errands for the professor.

Coursework

Economics (Graduate)

Microeconomic Theory 1 (ECON 6301)
Macroeconomic Theory 1 (ECON 6302)
Microeconomic Theory 2 (ECON 7301)
Macroeconomic Theory 2 (ECON 7302)
Econometrics 1 (ECON 6309)
Mathematical Economics (ECON 6305)
Monetary Economics (ECON 5397)

Economics (Undergraduate)

Introduction to Microeconomics (ECON 2103)
Introduction to Macroeconomics (ECON 2203)
Regulatory Economics (ECON 3010)
Intermediate Microeconomics - Honors Contract Credit (ECON 3113)
Intermediate Macroeconomics - Honors Contract Credit (ECON 3123)
Game Theory and Experimental Economics (ECON 3213)
Labor Economics (ECON 3513)
Econometric Methods (ECON 4213)
Business and Economic Forecasting - Honors Contract Credit (ECON 4223)
Honors Thesis (ECON 4993)

Mathematics

Business Calculus (MATH 2103)
Calculus 1 (MATH 2144)

Calculus 2 (MATH 2153)
Calculus 3 (MATH 2163)
Differential Equations (MATH 2233)
Games of Strategy: Contract Bridge: Honors - Honors Add- On (MATH 2910)
Mathematics of Perspective - Honors Add- On (MATH 2910)
Linear Algebra (MATH 3013)

Statistics

Statistical Methods for Data Science (STAT 6313)
Elementary Statistics and Business Economics - Honors Contract Credit (STAT 2023)
Intermediate Statistical Analysis - Honors Contract Credit (STAT 3013)
Mathematical Statistics 1 (STAT 4203)
Mathematical Statistics 2 (STAT 4213)

Other

Time Series Analysis 1 (EPPS 7370)
Time Series Analysis 2 (EPPS 7371)
Cost – Benefit Analysis (EPPS 7304)
Applied Geographic Information Systems (GISC 6379)
Data Visualization (EPPS 6356)
Fundamentals of GIS (GEOG 4203)
Advanced Honors Thesis Preparation: Economics and Legal Studies (HONR 3000)

Related Research Projects

Elementary Statistics and Business Economics research project (Fall 2014)
Title: *Big Data*
Description: This research paper focused on the definition of "big data" and the applications that are being used in everyday analytics. Real life examples are used in an attempt to explain the implications of big data in an increasingly data driven world.

Intermediate Microeconomics research project (Fall 2015)
Title: *An Economic Analysis of the Car Industry During the Great Recession*
Description: This research paper focused on the reaction of the automotive industry to the economic downturn that began in 2007 and analyzed the regulations that were implemented to benefit the industry. This analysis includes estimation and discussion of the supply and demand curve, price and quantity analysis, taxes, tariffs, import quotas, complementary goods, consumer surplus, and consumer preferences.

Intermediate Macroeconomics research project (Spring 2016)
Title: *Global Collapse and the Decline of the United States: From the Great Depression to the 2030's*
Description: This research paper analyzed the Kondratiev, Kuznets, Juglar, and Kitchin business cycles and discussed the possibility of the cycles lining up and creating a depression around the year 2030. Theories of the causes of business cycles and their implications are discussed, as are different cyclical processes that could potentially affect the other cycles, such as socio – political cycles.

Business and Economic Forecasting honors research project (Spring 2017)
Title: *Honors Research Paper*
Description: This research paper used airline revenue data from the Bureau of Transportation and analyzed the accuracy of different models and their effects on forecasts. Models analyzed include the Naïve No – Change model, ARIMA model, simple exponential smoothing model, Holt's double exponential smoothing model, Holt – Winters exponential smoothing model, adaptive – response exponential smoothing model, linear decomposition

model, Box – Jenkins model, and the regression model. Graphs and sensitivity analyses were provided, totaling 118 pages altogether.

Honors Thesis (Fall 2016 – Spring 2017)
Title: *Economic Tendencies in Response to Cyclical Patterns*
Description: This Honor's thesis analyzed the Kondratiev Cycle, discussing theories of this business cycle and analyzing historical events that were likely affected by it. Theories are then provided regarding the future implications of this cycle, such as a possible depression discussed among some economists around the year 2030. Transportation changes, speculative bubbles, depressions, and social movements, along with other social, political, and economic events, are discussed within different countries over hundred - year periods in order to better understand the implications of the cycle.

Data Visualization Project (Spring 2019)
Title: *The Fragmentation of College Enrollment Data*
Description: This project analyzes the ten largest states by population in order to determine if there are any underlying patterns inherent within the college enrollment ratios (total number of females enrolled over time/total number of males enrolled over time). More specifically, the project investigates the possibility that the state level ratios contain patterns and trends that are not captured in the overall dataset. R visualization methods are utilized, using such packages as ggplot2 and mvtsplot.

Cost – Benefit Analysis Project (Spring 2019)
Title: *My Analysis of "Benefit-Cost Analysis of a Package of Early Childhood Interventions to Improve Nutrition in Haiti"*
Description: This project analyzes a paper written by Brad Wong and Mark Radin, as published in the "Journal of Benefit – Cost Analysis" in 2019. This project analyzes the effectiveness of the cost – benefit analysis and suggests possible improvements to strengthen the accuracy of the results reached by the two researchers, such as using GIS to account for localized effects and using more direct surveys and other methods to obtain data rather than relying purely on rationalization assumptions.

Time Series Analysis 2 Project (Spring 2019)
Title: *An Analysis of the Effect of Unemployment and Scholarships on Male and Female Enrollment*
Description: This project uses a seemingly unrelated regression structure and Theil's F – test to determine if male and female enrollments respond the same to the changes in the unemployment rate or the average number of scholarships awarded per student. Other predictor variables suggested are shown to be insufficient for predicting the number of college enrollments. The possibility of long run cointegration between male enrollments and the average number of scholarships and female enrollment and the average number of scholarships are discussed, but are excluded from the analysis.

Honors/Awards

Fall 2017 – May 2019: Graduate Student Scholarship and TA Position
Bachelor of Science in Economics with Honors Distinction
President's Honor Roll: Summer 2014
Dean's Honor Roll: Spring 2017, Fall 2015, Fall 2014, and Fall 2013

Additional Qualifications and Skills

Proficiency in Stata, RATS, Matlab, and RStudio
Experience in Tableau
Experience in ArcGIS