# Morgan Holland, PhD

# Résumé

I am a PhD economist focused on economic and quantitative modeling, data analysis, and numerical methods.

**Specializations** 

- Economic Applying economic thinking and mathematical modeling to support decision making. Specific expeand rience with:
- Quantitative o Macroeconomic modeling, including
  - Modeling Real business cycles,
    - Economic growth and inequality.
    - o Financial contracting models under asymmetric information,
    - Tax incidence modeling,
    - Market analysis,
    - Economic effects of infrastructure spending,
    - Economic impact analysis.

Data Analysis Choosing, implementing, and disseminating data analysis with a focus on causal inference and econometrics. Techniques implemented include, but are not limited to:

- Regression analysis,
- o Limited dependent variable models,
- Longitudinal/panel data methods,
- Time series analysis,
- Factor analysis,
- o GIS.
- Numerical Supporting quantitative modeling with numerical programming, including:
  - Methods Choosing appropriate algorithms for nonlinear equation solving,
    - o Solving systems of differential equations with saddle-points using bijective reverse-shooting,
    - o Global and local maximization techniques for differentiable and nondifferentiable functions.

#### Education

- July 2022 Doctor of Philosophy in Economics, Florida State University COSSPP.
- Dec 2014 Master of Arts in Economics, The University of South Carolina Moore School of Business.
- Dec 2010 Bachelor of Business Administration, Mississippi College School of Business.
- May 2009 Associate of Arts in Business Administration, Meridian Community College.

# Professional Positions

2021–Present Senior Researcher, FSU Center for Economic Forecasting and Analysis, Tallahassee (remote).

- Managing projects involving economic and statistical analysis both independently and in teams from initial contact with clients to finished reports.
- Communicating with clients and partners to define the scope of economic questions and resources needed for analysis.
- o Collecting, organizing, and preparing data for analysis.
- Gathering and summarizing literature relevant to the context and methodology of client problems.
- Performing economic and econometric analyses to answer questions and provide solutions for clients and partners.
- Writing and presenting finished deliverables and reports according to contract specifications.
- See Applied Economic Analysis Experience for more details.

#### 2015–2021 Graduate Research/Teaching Assistant, Florida State University COSSPP, Tallahassee.

- Managed classes of up to 45 students, both online and in-person.
- Developed custom instruction materials that integrated statistical software instruction, mathematical foundations of statistics, and practical applications of statistics to economic analysis.
- Conducted original academic research in economics, both independently and under the supervision of faculty.
- See Teaching Experience and Academic Research for more details.
- 2013 Graduate Research Assistant, University of South Carolina, Moore School of Business, Columbia.
  - Located and retrieved ownership data from Initial Public Offering (IPO) prospectuses.
  - Constructed custom spreadsheets of IPO data.
  - Performed literature searches for scholarly articles on several subjects related to corporate finance.

#### 2012–2013 Auditor, South Carolina Office of Regulatory Staff, Columbia.

- Advocated on behalf of the public in utility rate case proceedings before the South Carolina Public Service Commission.
- Audited utility rate case filings to verify the accuracy of financial data.
- Recommended adjustments to test-year revenue requirement analyses based on company financial data and rate case filings.
- Crafted written testimony to be filed with the South Carolina Public Service Commission.
- Reviewed nuclear plant construction invoices for compliance with the South Carolina Base Load Review Act and consistency with company financial documents.
- Examined telecommunications company filings and financial documents for compliance with telecommunications law.

#### 2011–2012 Accountant/Auditor, Mississippi Department of Finance and Administration, Jackson.

- Audited payments to State Treasurer for errors.
- Assisted state agencies in completing payments to the State Treasury.
- Approved transactions in a computerized accounting system.
- Verified accuracy of daily deposits to the State Treasury.

# Applied Economic Analysis Experience

#### **Completed Projects**

Florida State's Economic Impact. 2021 version based on 2020 data. https://economic-impact.fsu.edu/.

The Economic Impact of a Reduction in the Sales Tax on Manufactured Homes. https://cefa.fsu.edu/sites/g/files/upcbnu1851/files/Final%20FMHA%20Report% 202-15-22-CLEAN.pdf

An Economic Impact Analysis of Humana/Humana Florida Medicaid in Florida.

The Economic Impact of NASCAR operations in Florida.

The Economic Impact of the McGriff Channel Dredging Project.

#### **Ongoing Projects**

An Economic Impact Analysis of Mosaic.

An Economic Impact Analysis of Eighteen Blueprint Projects and Three Traffic Flow Analyses. An Economic Impact and Valuation Analysis of the Pensacola & Perdido Bay Estuary Program.

# Academic Research

**Morgan Holland**. *The Role of Long-term and Short-term Risk in Relationship Banking*. (Working Paper)

Manoj Atolia, **Morgan Holland**, and Jonathan Kreamer. *Growth, Income Distribution, and Policy Implications of Automation*. (Submitted to the Journal of Economic Dynamics and Control)

Manoj Atolia, **Morgan Holland**, and Jonathan Kreamer. *Wage, Wealth, and Income Inequality from Automation*. (Working Paper)

Margaret Holland and **Morgan Holland**. The Impact of the Americans with Disabilities Act on the Employment and Earnings of People with Disabilities: An Intersectional Approach. (Working Paper)

## **Teaching Experience**

#### Instructor

Average Rating: 4.38/5

2016–2021 Analysis of Economic Data. Upper-level course leading into Introduction to Econometrics.

- Developed custom instruction materials for statistics focusing on economic data.
- o Integrated R programming to teach students practical data management and analytical tools.
- Engaged with students using real-world examples of using data analysis and econometrics to answer economic questions.
- Topics:
  - Data cleaning and preparation,
  - Probability,
  - Statistical hypothesis testing,
  - Linear regression.

#### 2017-2020 Introduction to Econometrics

Integrated R programming and econometric theory in the classroom and in online environments
Topics:

- Linear regression for causal analysis
- Gauss-Markov theory and applications
- Failures of the Gauss-Markov assumptions and the consequences for causal inference
- Techniques for dealing with common failures of the Gauss-Markov assumptions
- Real-world examples of econometric analysis, its successes, and limitations

#### **Teaching Assistant**

Financial Markets, Banking, and Monetary Policy Economics of Population

# Programming and Software

> 10 years Excel, Word, PowerPoint

- 5-10 years R, Julia, Matlab, Stata
- 2-5 years Python
- 1-2 years SQL
- ${<}1 \ {\rm year} \ \ {\rm IMPLAN}, \ {\rm JobsEQ}, \ {\rm MongoDB}$

# Fellowships, Memberships, Miscellaneous

- 2020-2021 Bartlett Fellowship for Excellence in Economic Education, Florida State University.
- 2015–2019 Johnson Fellowship, Florida State University.
- 2013–2015 Merit Scholarship, Moore School of Business.
- 2009-2010 Phi Theta Kappa Alumni Scholarship, Mississippi College.
- 2007-2009 Phi Theta Kappa member, Meridian Community College. PADI certified rescue diver.