

Nicole Golden, Ph.D.

Economist / Data Scientist / Machine Learning Researcher

Email: qinqiy1@uci.edu

Page: GoldenEconomics.com

Sample Code: GitHub.com/NicoleGolden

Cell: (616) 888-9881

LinkedIn: LinkedIn.com/in/GoldenEconomics

Location: Washington, DC 20001

Professional Experience

Survey Statistician

04/2024 – Present

Census Bureau

- Led research and quantitative analysis on global projects, including world aging, fertility, and climate change, with a focus on middle- and low-income countries. Conducted literature reviews, data collection, processing, and visualization, tailoring reports for diverse stakeholders and presenting findings at domestic and international conferences.
- Managed and automated data processing for the International Database, integrating subnational data for the first time ahead of schedule. Developed streamlined workflows, enhanced diagnostics, and documented processes for future releases, earning the Employee of the Month Award.
- Designed and implemented data-driven tools for low-income countries, including an R training workshop for NSOs, a community resilience toolkit, an automated reporting system, and an AI-powered auto-detection tool to improve census questionnaire design and data collection.
- Supervised and mentored a summer intern, leading the development of an interactive data quality diagnostics dashboard. Initiated a pilot project leveraging machine learning to automate census data processing. Pursued continuous professional training to stay at the forefront of census methodologies, economics, and data science.

Data Scientist

01/2024 – 06/2024

World Bank

- Led the GDP Nowcasting project, conducting research and machine learning modeling to predict high-frequency GDP in African countries by integrating traditional economic indicators with alternative data sources (e.g., Google Trends, nighttime lights, weather data). Collaborated with international agencies to enhance modeling approaches.
- Managed data acquisition and automation, compiling comprehensive metadata and alternative data to develop efficient data collection and prediction tools, streamlining workflows for improved forecasting accuracy.

Economic Affairs (Summer)

06/2023 – 09/2023

United Nations

- Conducted statistical analysis for the Least Developed Countries (LDCs) team, including data collection, visualization, and text analysis to support key initiatives.

- Coordinated high-profile political events, such as UNGA 78 and the LDCs National Focal Points Meeting 2023, preparing materials and ensuring effective communication with international delegates and interpreters, while producing publishable reports in a fast-paced, high-pressure environment.

Data Analyst

02/2022 – 01/2023

EcoMetricx

- Developed production-ready code for large-scale causal analysis of energy consumption across multiple U.S. states, leveraging parallel computing to enhance efficiency. Designed and optimized causal models to quantify treatment effects and improve reporting accuracy.
- Conducted advanced data analysis, including sentiment analysis on customer satisfaction surveys, to generate actionable insights. Prepared and delivered monthly reports for stakeholders, ensuring clear communication of findings.

Graduate Researcher

03/2021 – 06/2022

Deep Data Lab

- Executed cost-benefit analysis of U.S. food voucher programs using Nielsen consumption data to assess price heterogeneity and its impact on fresh produce affordability; responsibilities included literature review, data processing, index construction, and research paper writing.
- Collaborated with the research team, contributing insights on economic and machine learning models and presenting findings in weekly meetings and reports.

Teaching Assistant & Independent Researcher

09/2019 – 03/2024

University of California, Irvine

- Conducted five years of independent research in causal inference, machine learning, and deep learning, analyzing financial and food consumption data to study financial health and consumer behavior; authored various research papers using advanced statistical and computational methods.
- Taught advanced economics courses, including Microeconomics, Macroeconomics, Global Economics, and Econometrics.

Skills

Program

R, Python, Stata, SQL, Git, GitHub, GitLab, HTML, Latex, Microsoft

Language

English (professional), Mandarin (native), French & Spanish (intermediate)

Education

Ph.D. in Economics

09/2019 – 03/2024

University of California, Irvine

Certifications

- Machine Learning, Data Science and Deep Learning with Python
- Complete Generative AI Course with Langchain and Huggingface (ongoing)