

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

- Advanced quantitative research on global aging and climate change across national and subnational levels, focusing on low- and middle- income countries (LMICs); collaborated with inter-agency teams, independent researchers, and National Statistical Offices (NSOs). Conducted research, data collection, analysis, and visualizations to inform stakeholders and present findings at international conferences.
- Developed data-driven tools to strength capacity building in LMICs, with a focus on census data collection, community resilience, and climate adaptation. Key initiatives included R training workshops for international NSOs (English/French), a localized community resilience toolkit, and an automated reporting system. Facilitated workshops to enhance data capacity in African countries and initiated automated data quality diagnoses tool to improve pilot census questionnaire design.
- Automated data processing for the International Database, integrating subnational data for the first time ahead of schedule. Developed streamlined workflows, enhanced data quality diagnostics, and documented production processes for future releases, earning the Employee of the Month Award.
- Mentored a summer intern in developing an interactive data quality diagnostics dashboard and initiated an AI-powered auto-detection tool to enhance census data collection. Committed to continuous professional development in census methodologies, economics, and machine learning.

Data Scientist

01/2024 – 06/2024

World Bank

- Led the GDP Nowcasting project, developing machine learning models to predict high-frequency GDP in African countries by integrating traditional economic indicators with alternative data sources (e.g., Google Trends, nighttime lights, climate data). Conducted research, optimized modeling approaches, and collaborated with international agencies to enhance predictive accuracy.
- 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

- Performed statistical analysis for the Least Developed Countries (LDCs) team, integrating statistical analysis methods including data collection, visualization, and text analysis to support key initiatives under the UN Agenda 2030 and SDGs, driving human development and climate adaptivity efforts.

- 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

- Engineered production-ready code for large-scale causal analysis of smart meter energy consumption data across multiple U.S. states, leveraging parallel computing to optimize efficiency. Designed and refined causal models to quantify treatment effects and enhance reporting accuracy.
- Performed advanced data analysis, including sentiment analysis on customer satisfaction surveys, to extract actionable insights. Developed and presented monthly reports to stakeholders, ensuring clear, data-driven communication of energy usage trends and recommendations.

Graduate Researcher 03/2021 – 06/2022

Deep Data Lab

- Executed cost-benefit analysis of U.S. food voucher programs using big data to assess price heterogeneity and its impact on fresh produce affordability; responsibilities included literature review, data processing and visualization, index construction, and research paper and report writing.
- Collaborated with research team members to provide insights on economic and machine learning models, effectively 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.
- Delivered engaging advanced economics and statistical courses, including Econometrics, Microeconomics, Macroeconomics, Global Economics, and Probability.

Skills

Program	Language
Python, R, SQL, Stata, Excel (VBA), Power BI, Git, VS Code, Jupyter Notebook, RStudio, HTML	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 (In Progress)
- AWS Machine Learning Foundations (In Progress)