## NICOLE GOLDEN

Personal Ph.D. Candidate Email: qinqiy1@uci.edu
Information University of California, Irvine Cell: (616) 888-9881

Department of Economics Page: www.GoldenEconomics.com

Last Updated: September 10, 2023 Nationality: US

Education UC, Irvine 2019 September – Present

Ph.D. in Economics, 2024 June (Expected) Fields: Applied Econometrics, Machine Learning

M.A. in Economics, 2021

University of Iowa 2017 August – 2019 August

B.A. in Economics and Mathematics

Phi Beta Kappa

Research **Deep Data Lab - UC, Irvine** 2021.03.01–2022.06.30

Experience Research Assistant for Dr. Matthew Harding

Topic: Constructing price indexes at metropolitan, county, and state levels

Data: Nielsen fresh fruit and vegetables store data

Keywords: Price index, inflation, heterogeneous prices, policy evaluation, retail,

Nielsen, big data, fresh fruit and vegetables, food.

UC, Irvine 2019 September – Present

Fourth-Year Paper

Topic: Heterogeneous Treatment Effect of Payday Loan Extended Payment Plans

on Financial Health: A Double/Debiased Machine Learning Approach

Data: Clarity payday loan data

Keywords: Payday loans, household finance, financial health, Clarity, big data, double

machine learning, heterogeneous treatment effect.

Third-Year Paper

Topic: The Effect of Payday Loan Extended Payment Plans on Financial Health:

A Synthetic Difference-in-Differences Approach

Data: Clarity payday loan data

Keywords: Payday loans, household finance, financial health, synthetic difference-in-

differences, average treatment effect, Clarity, big data.

Second-Year Paper

Topic: Got Milk? An Empirical Study of Milk Consumption Patterns Based on

Movers

Data: Nielsen milk data

Keywords: Consumer consumption patterns, retail, migration, food, big data, Nielsen,

nutrition, difference-in-differences, dairy milk, plant-based milk.

Work Experience

#### **United Nations**

2023.06.05 - 2023.09.22

xperience Economic Affairs, intern

- Performed statistical analysis related work for the Least Developed Countries (LDCs) team, including data collection, data visualization, data analysis, text analysis, and generating economic reports.
- Co-organized and assisted high-level political meetings such as the UN General Assembly (UNGA 78), the LDCs National Focal Points (NFPs) Meeting 2023, and the SDG summit side events. The task may include preparing for meeting related materials, communicating with international delegates and live interpreters throughout the meeting, and generating meeting summary report and meeting questionnaire report.

#### **EcoMetricx**

2022.02.04 - 2023.02.20

Data Analyst

- Supported chief economist on projects related to state energy usage in the US. Tasks may include but are not limited to:
  - (i) Built causal models to analyze monthly energy usage. The data includes monthly electricity and gas usage in the US. The analysis intends to study the average treatment effects by comparing the control group (which is not exposed to any energy-saving programs) and the treated groups (which are exposed to multiple energy-saving programs).
  - (ii) Ran models and generated monthly reports.
  - (iii) Helped with other data analysis related work, such as analyzing customer satisfaction surveys.
- Translated data analysis code from Python or Stata to R and wrote pipelines in R.

Teaching Experience

## UC, Irvine

2019.September – Present

**Teaching Assistant** 

• Teach undergraduate level courses including Introduction to Microeconomics, Introduction to Macroeconomics, Probability and Statistics, and Econometrics I.

Online Mandarin Teacher

- Taught 812 lessons to 123 students from 31 countries (located in five continents); earned an overall full-point review from all students.
- Wrote various creative teaching materials designed for different levels of students.
- Experienced language and cultural exchange with students from different countries.

# Professional Skills

# **Programming:**

### Software:

R: advanced.

GitHub, Git, Latex, Excel, Word, PowerPoint: proficient.

Python, Stata, SQL, Html5: basic.

# Data Analysis:

Machine learning, deep learning, econometrics models, Big data, alternative data, Data collection, data cleaning, data visualization, data analysis,

parallel computation and pipelines.

### Research interests:

Retail, food, consumer consumption patterns, household finance, AI, policy evaluation.

### Languages:

Mandarin: native English: fluent

French, Spanish: conversational