

THOMAS FULLAGAR

North Hall
Department of Economics
University of California, Santa Barbara
(785) 313-1060 | fullagar@ucsb.edu

SUMMARY

Data Analyst with extensive experience in using Python and SQL to transform complex data into actionable insights. Proven ability in developing and deploying production-level machine learning models and algorithms to enhance business outcomes. Expertise in data cleaning, feature engineering, and innovative AI/ML techniques, including model fine-tuning and leveraging generative AI frameworks. Committed to delivering clear, data-driven solutions that drive business performance.

ADDITIONAL INFORMATION AND SKILLS

- **Mentorship:** Undergraduate-Graduate Research Partnership (UGRP) [Spring 2024], CSUCI-UCSB Summer Research Program [Summer 2023]
- **Data Experience:** CSV, JSON, XML, Relational Databases (SQL), Large Datasets, Cloud Computing (AWS, Azure), Collaboration (Docker, GitHub), Data Analysis (Pandas, Tidyverse), Data Visualization (Tableau, Plotly, Shiny)
- **Statistical Experience:** Causal Inference (RD, DID, RCT, Synthetic Control), Machine Learning (PyTorch, Scikit-learn, TensorFlow), Time Series Analysis (ARIMA, Forecasting), Discrete Choice (Probit, Logit, LPM)
- **Programming and Other Languages:** Stata, R, Python, Excel, SAS, JavaScript, LaTeX, HTML

WORK EXPERIENCE

UCSB Economic Forecast Project

Jul 2020 - Present

Data Scientist

Santa Barbara, CA

- Collected, processed, and analyzed diverse datasets using R and Python to inform stakeholders on local employment, real estate, demographic, and health trends, emphasizing data cleansing and feature engineering techniques.
- Measured employment and wages across different industries and locations (OEWS, CPS data) to provide an accurate snapshot of the labor market.
- Maintained a website (HTML, GitHub, RMarkdown) featuring interactive charts (Shiny) to enhance data visualization and stakeholder engagement.
- Interviewed, trained, and supervised a team of up to six undergraduate research assistants, ensuring high quality data collection and analysis.
- Leveraged Python to automatically collect data from various online sources and stored them in a SQL database, streamlining the data aggregation process.
- Applied deep learning models (LMST) using Python frameworks to forecast demand and assist Santa Barbara hotels in optimizing pricing strategies.
- Authored articles explaining complex economic principles in clear, accessible language for a broad audience.

Welch Consulting

Jun 2016 - Jul 2018

Data Analyst

Bryan, TX

- Collaborated with economists to generate clear, accurate statistical analyses (OLS, GLM, Discrete Choice) under tight deadlines, integrating rigorous data manipulation and exploratory analysis techniques.
- Employed Stata to create tidy datasets from large, complex company data, ensuring data integrity and quality.
- Conducted statistical and economic analyses of extensive datasets using Stata to calculate damages or identify employment and wage disparities.
- Presented graphs, tables, and other visuals to effectively communicate key metrics and insights to clients and stakeholders.
- Developed Excel-based exposure models that enabled clients to interactively toggle parameters and assess various scenarios.
- Engaged with clients and colleagues to define optimal strategies and timelines, ensuring clear communication of technical results.

U.S. Census Bureau

Jun 2010 - Aug 2010

Enumerator

Manhattan, KS

- Conducted door-to-door surveys with diligence, ensuring accurate data collection.
- Systematically relayed completed surveys to supervisors, maintaining strict adherence to schedules.
- Navigated challenging social interactions and maintained persistent efforts during fieldwork.
- Achieved the highest number of completed forms per hour within the team through efficient data gathering techniques.

University of California Santa Barbara

Sep 2018 - May 2020

Teaching Assistant

Santa Barbara, CA

- Supported introductory and intermediate Economics and Econometrics courses by clarifying complex concepts for undergraduate students.
- Led sections of up to 30 students, employing clear communication and practical examples to enhance understanding of economic theories.

University of California Santa Barbara

Research Assistant

• Collected, cleaned, and performed survey analysis on extensive datasets from the PSID, ensuring robust data quality.

• Coordinated a team of four undergraduate students to accurately record question-asking patterns during exams.

• Authored a comprehensive literature review detailing data, methods, and outcomes from academic studies on pharmaceutical drug pricing.

Jun 2020 - Aug 2022

Santa Barbara, CA

EDUCATION

University of California Santa Barbara

Ph.D., Economics

The University of Texas at Austin

Master of Arts, Economics

Kansas State University

Bachelor of Arts, Economics

Bachelor of Arts, Philosophy

Jun 2025

May 2016

May 2015

RESEARCH

- *Job Market Paper:* "Establishment-Level Unionization at Large Firms: Evidence from the 21st Century" with Alexander Abajian.
- "Posting Pay Transparency and Worker Outcomes: Evidence from Recent US State Laws" with Sebastian Brown.
- "The Impact of the Inflation Reduction Act on Pharmaceutical R&D" with George Yang.