Shahin Karami

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Summary of Qualifications

Graduate of California Polytechnic State University with a MS in Quantitative Economics, combining a strong theoretical foundation with practical expertise in econometrics. Experienced in utilizing a wide range of tools, including Python, SQL, R, Tableau, and Excel, to extract actionable insights from data. Eager to leverage this skill set, honed through coursework, personal projects, and research, to tackle complex data-driven challenges and drive informed decision-making.

Education

California Polytechnic State University   *San Luis Obispo, CA*
MS in Quantitative Economics | *GPA: 3.92*   *June 2023*

University of California, Santa Cruz   *Santa Cruz, CA*
BA in Mathematics & Economics | *GPA: 3.45*   *June 2021*

Employment History

Graduate Research Assistant   *San Luis Obispo, CA*
World Bank | Global Education Policy Dashboard   *January 2023 - June 2023*

- Collaborated with The World Bank in analyzing survey data from public and primary school officials to explore the role public officials have on educational outcomes.
- Implemented Double Machine Learning method to deliver a precise range of estimates (0.5 p.p - 10 p.p) of the effect of bureaucratic perceptions on educational outcomes.
- Produced a technical report highlighting the effectiveness of Double Machine Learning compared to traditional regression methods.

Teaching Assistant   *San Luis Obispo, CA*
Orfalea College of Business   *September 2022 – June 2023*

- Held weekly office hours and one on ones with students to better assist them with course material.
- Tasks included: Grading exams, projects, weekly assignments, and proctoring exams as needed by course instructors.

Research Assistant   *Santa Cruz, CA*
UCSC Economics Department   *April 2020 – December 2021*

- Conducted literature review on vaccine hesitation and adoption methods under Dr. Kristian Lopez Vargas.
- Assisted with the development of an online Intermediate Microeconomics Theory Course.
- Drafted original course notes for Producer Theory, Competitive Markets, and Game Theory.

Personal Projects

Hourly Time Series Forecasting using XGBoost and Prophet
Personal Project | *Python*

- Utilized XGBoost and Facebook's Prophet models to forecast hourly energy consumption.
- Conducted a comparison of error metrics between both models, favoring XGBoost conclusively (5.74% MAPE vs. 12.06% MAPE).
- Developed and trained an XGBoost model for predicting energy consumption, enabling accurate next-day forecasts.

UEFA Champions League Historical Data Dashboard
Personal Project | *Tableau*

- Created a Tableau Dashboard for visualizing historical competition statistics spanning from the 1992/93 to 2021/22 group stage.
- Showcased crucial metrics, including appearances for coaches, players, and teams, as well as goals scored by both players and teams.

Exploratory Data Analysis of UK Vehicle Accident
Personal Project | *TSQL*

- Thoroughly cleaned, transformed, and meticulously prepared UK Road Safety datasets using Python, ensuring data clarity and reliability.
- Utilized Microsoft SQL Server Management Studio to conduct exploratory data analysis on UK Road Safety datasets.

Using Machine Learning to Create Price Prediction for Tokyo Based Real Estate Company
Personal Project | *Python*

- Performed extensive exploratory data analysis employing the SweetViz Package.
- Carried out correlation analysis using ANOVA and the Pearson Correlation coefficient.
- Developed a robust Gradient Boosting Regression model with a MAPE of 0.49% to predict real estate prices.
- Conducted in-depth model analysis, affirming the reliability and efficacy of the Gradient Boosting Regression model.