

JUGAL MARFATIA

Data Scientist | Statistics | Econometrics | Machine Learning | Python | R | SQL

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EDUCATION

Ph.D. Economics

Washington State University

📅 May 2021

Fields: Econometrics, Industrial Organization.

M.S. Statistics

Washington State University

📅 May 2021

Statistical Computing, Multivariate Analysis, Linear Models

M.A. Economics

San Diego State University

📅 May 2017

B.A. Economics

Western New England University

📅 June 2015

DATA SCIENCE EXPERIENCE

Data Science/ Regional Models Intern

San Diego Association of Governments ([Sandag](https://sandag.org))

📅 June 2016 – August 2017

📍 San Diego, CA

- Developed **Python** based **demographic** and **economic** forecasting model adopted by 17 San Diego counties for regional planning. github.com/SANDAG/pydefm.
- Contributed towards the development of **real estate forecasting model** also based in **Python**. github.com/SANDAG/sandag_urbansim.
- Created Python/SQL scripts to automate compilation of data from BLS, BEA, Census, California Dept. of finance / Education.
- Developed several visualization and logical check tools for data quality check purposes.
- Made presentations to senior executives and business partners explaining modeling process and results.

Research Assistant

San Diego State University

📅 August 2015 – May 2017

📍 San Diego, CA

- Conducted Data/ Statistical analysis on health and elderly care that resulted in 1 published paper. [Paper Link](#).
- Conducted econometric analysis on issues of immigration and income inequality in the United States.
- Cleaned and analyzed large panel data sets with over 1 million observations from IPUMS.

TECHNICAL SKILLS

Programming: Python R SQL

Data Science Frameworks: Pandas SciPy

NumPy Scikit-Learn Matplotlib

TensorFlow/ Keras Seaborn Ggplot2

Flask StatsModel Git

CERTIFICATES

- Deep Learning Specialization.
- Applied Machine Learning in Python.

RESEARCH IN PROGRESS

- Can Google Trends data be used to predict stock returns? [Link](#)
- Predicating Health Care Expenditure in U.S.; Learning from Random Forests.

DATA SCIENCE PROJECTS

- “Wimbledon Predictions using Neural Network.” published in towards data science. [Link](#)
- Top 10 % (bronze medal), Kaggle IEEE-CIS Fraud Detection Competition 2019.
- Top 17 %, Kaggle APTOS 2019 Blindness Detection Competition.

AWARDS

- 2nd prize, Research Poster Competition, SES-WSU 2019.
- Terhune Economics Scholarship, SDSU 2017.
- The Weintraub Research and Center for Public Economics Scholarship, SDSU 2017

TEACHING EXPERIENCE

Instructor

Washington State University

📅 January 2019 – Present

- Econ 321-Economics of Sports. 3 Semesters.

San Diego State University

📅 August 2016 – May 2017

- Econ 101-Macroeconomics. 2 Semesters.