

John Guo

Data Analyst

Boston, MA | (206) 291-0217 | [Email](#) | [LinkedIn](#) | [Portfolio](#) | [Tableau Public](#)

Data analyst with an M.A. in mathematics and six years of experience teaching college math. Experienced with investigating data, extracting key insights, and communicating the most relevant takeaways in a clear and cohesive way. Eager to share actionable findings via storytelling and illustrative visualizations.

Skills:

Python (Numpy Pandas Scikit-learn) | Data Visualization (Matplotlib Seaborn Tableau) | SQL | Excel
Data Cleaning | Data Analysis | Data Modeling | Machine Learning | Neural Networks | Keras | Docker
Hypothesis Testing | Web Scraping | Git/GitHub | Bash | Statistics

Experience

Math Professor

2018 - 2022

Seattle Central College and Shoreline Community College

Seattle, WA

- Taught over 30 math courses ranging from pre-algebra to calculus II.
- Recorded more than 200 online math videos to supplement teaching remotely over Zoom.
- Analyzed data on course pass rates to determine which courses students struggled with the most and where curriculum revision could be performed.
- Collaborated with faculty to create free Mathematica resources for students to replace a mandatory 1-credit class, reducing the costs for all STEM students by up to \$306.92.

Projects

- Trained a convolutional neural network on 21,000 short audio recordings to classify sounds as laughs, coughs, sniffs, sneezes, sighs, or throat clears with 87% accuracy.
- Used Pushshift's API to request 5,000 forum posts from Reddit. Cleaned the text and analyzed major language differences between two subreddits (r/Seattle and r/SeattleWA).
- Identified ideal Los Angeles billboard placements for advertising to traffic accident victims using the DBSCAN clustering algorithm on California Highway Patrol accident data.
- Predicted housing prices in Ames, Iowa using linear regression. Then inferred which home qualities had the strongest influence on sales price.
- Built a Tableau dashboard to visualize video game sales history across different regions.

Education

General Assembly

2022

Data Science Immersive

Completed a 480+ hour project-based data science program that focused on solving business challenges using data analysis and predictive modeling.

San Francisco State University

M.A. in Mathematics

2017

B.S. in Applied Mathematics - Emphasis in Computer Science

2015

Publication *The Configuration Space of a Robotic Arm in a Tunnel*, with F. Ardila, H. Bastidas, and C. Ceballos. SIAM Journal of Discrete and Applied Mathematics. **31** (2017) 2675-2702.

Favorite Hobby Rock climbing. I have been an avid boulderer for over 10 years.