

# Sormeh Yazdi

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## EDUCATION

### **Carnegie Mellon University**

*Masters of Science Degree in Public Policy Management & Data Analytics*

Pittsburgh, Pennsylvania

Aug, 2019 – Jun, 2021

### **Wellesley College**

*Bachelor of Arts Degree in Astrophysics*

Wellesley, Massachusetts

Aug, 2012 – Jun, 2016

## SKILLS

**Tools:** Python, R, SQL, STATA, Excel, RShiny, GUI Programming, IDL, MATLAB, LATEX, Arduino

**Languages:** English, French, Farsi, Spanish

## DATA SCIENCE EXPERIENCE

### **FinRegLab**

*Research Analyst*

Washington D.C.

Jun, 2021 – Present

- Performing data analysis to identify sources of bias in default-risk reporting and assess the impacts of proposed interventions.
- Coding in Python to analyze and manipulate data for Machine Learning project involving 7 FinTech companies.
- Facilitate cooperation between FinRegLab, Stanford University and FinTech companies regarding project.
- Presenting poster from white paper at ICML 2022 workshop on responsible decision making in dynamic environments.

### **Machine Learning to Predict Election Turnout** *Machine Learning for Public Policy*

Aug, 2020 – Dec, 2020

- Created a predictive model of voter turnout in Florida using Florida voter history data and census data.
- We used a decision tree model that achieved a precision of 0.69 and TPR of 1.06.
- The goal was to produce a model that would benefit voter outreach groups to identify non-voters in upcoming elections.

### **Economics Research on US Migration and Trade** *Research Assistant for Prof Brian Kovak*

Jun, 2020 – Aug, 2020

- Cleaned raw US county-level migration data for analysis in Python and STATA.
- Analyzed and reviewed data sources and data sets for research work. Scraped data from government sites using Python.
- Created an interactive map and gif in R visualizing migration between counties overtime in the US.

### **Post-Op Complications Trajectory Modeling** *Research Assistant for Prof Rema Padman*

Oct, 2019 – Jun, 2020

- Assisted physicians to identify patients at risk of post-op complications using group-based trajectory and predictive modeling.
- Used STATA for group-based trajectory modeling, R for statistical analysis, and Python for data cleaning.
- Produced presentation of model for collaborating physicians.

### **Gender Income Gap Examination** *R Programming Project*

Nov, 2019 – Dec, 2019

- Identified the statistical significance of the difference in income between men and women using a public dataset.
- Completed data summary and identified key factors associated with income difference.
- Findings section included tabular and graphical summaries, along with regressions and statistical interpretations.

## OTHER EXPERIENCE

### **Heinz College**

*Head Teaching Assistant, Management Science I & II*

Pittsburgh, Pennsylvania

Feb, 2021 – Jun, 2021

- Managed a group of 10 TAs and perform administrative tasks for a class of 100+ students.
- Taught students to use Excel to model and solve quantitative problems and basic operations research.
- Performed additional instructional duties such as leading recitations, holding office hours and grading assignments and exams.

*Teaching Assistant, Programming R for Analytics*

Oct, 2020 – Dec, 2020

- Led biweekly recitations and met with students 2-4 times per week for office hours.
- Graded weekly homework assignments for 90+ students.

### **MIT Kavli Institute**

*Science Software Engineer, REXIS (REgolith X-ray Imaging Spectrometer)*

Cambridge, Massachusetts

Aug, 2017 – Jun, 2018

- Provided analysis for lab experiments on non-flight and flight hardware.
- Characterized key features of satellite instrument, using Python for system analysis.
- Improved upon graphical user interface software intended for public use when arrived at target asteroid, Benu.
- Wrote image processing script for better understanding of data.

*Senior Research Support Associate, TESS (Transiting Exoplanet Survey Satellite)*

Jul, 2016 – May, 2018

- Characterized key features of satellite cameras using bash, IDL and Python for analysis.
- Presented a poster with Dr. Villaseñor and Dr. Prigozhin for a conference at Brooklyn National Laboratory.
- Monitored Flight Instrument data at Orbital ATK.

## Grants & Publications

Machine Learning Explainability & Fairness: Insights from Consumer Lending, FinRegLab et al

Apr, 2022

KELT-21b: A Hot Jupiter Transiting Rapidly-Rotating Metal-Poor Late-A Primary of Likely Hierarchical Triple, Johnson et al

Dec, 2017

KELT-16b: A Highly Irradiated, Ultra-short Period Hot Jupiter Nearing Tidal Disruption, Oberst et al

Feb, 2017

NASA Space Grant for work with KELT targets

2014 – 2016

Wellesley College Student Research Grant - for research in France at the international SOLEIL Synchrotron facility

Feb, 2014

Rotation Periods and R Magnitudes of Three Koronis Family Members, Anicia Arredondo, Anne-Marie Hartt, Sormeh K. Yazdi

Jul, 2014