Sormeh Yazdi

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EDUCATION

Carnegie Mellon University — Pittsburgh, Pennsylvania
Masters of Science Degree in Public Policy Management & Data Analytics — Aug, 2019 – Jun, 2021

Wellesley College — Wellesley, Massachusetts
Bachelor of Arts Degree in Astrophysics — 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 — Washington D.C.
Research Analyst — 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 — Pittsburgh, Pennsylvania
Head Teaching Assistant, Management Science I & II — 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 — Cambridge, Massachusetts
Science Software Engineer, REXIS (REgolith X-ray Imaging Spectrometer) — 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, Bennu.
- 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. Villasenor 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