Jules Tucher

Data Analyst

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Statistical Programming | Data Visualization | Project Management

QUALIFICATION SUMMARY

Data Analyst with experience performing complex statistical programming across various content areas, including education, labor, and nutrition. Skilled in cleaning, wrangling, and analyzing complex data sets using Stata, R, SQL, and Python, as well as designing interactive data visualizations and dashboards in Tableau. Demonstrated ability to build automated reports, ensure data quality, and maintain documentation, with a strong background in research and publication.

KEY SKILLS

✓ Python	✓ SQL	✓ Git/GitHub
✓ R	✓ Tableau	✓ ArcGIS
✓ Stata	✓ Microsoft Office	✓ HTML/CSS

RELEVANT PROFESSIONAL EXPERIENCE

Data Analytics Associate Aug 2021 - Present

Mathematica Policy Research Oakland, CA

Perform complex statistical programming across education, labor, and nutrition content areas in Human Services division. Serve in several project roles, including programmer, data lead, and project manager. Mentor new staff and support acquisition of new programming skills.

- Clean, wrangle, and perform statistical analysis in Stata, R, and Python on complex administrative and survey data sets to answer important research questions.
- Design and develop interactive data visualizations and dashboards for client in Tableau to extract and convey narratives from data.
- Build automated reports using SQL and Python for end clients and maintain concise documentation, including data definitions and program specifications.
- As project manager, monitor risk, implement data security plan, and maintain task timelines.
- As data lead, estimate staff level of effort, write programming specifications, and delicate project tasks. Facilitate communication between research and programming teams. Perform thorough quality assurance.
- Awarded Silver Spot Award for excellent project contributions.

Research Assistant January 2019 - May 2021

Williams College Mathematics/Statistics Department Williamstown, MA

Collaborate with Professor Chad Topaz to create a predictive model for Affirmative Action policies and assess critical mass in undergraduate admissions. Co-author on resulting publication.

- Create robust and informative predictive model for undergraduate admission, retention, and graduation rates using public administrative data from University of California.
- Evaluate Affirmative Action policies and assess critical mass in undergraduate campus demographics.

- Design and publish interactive data dashboard built in RShiny to disseminate visual results.
- Validate code and edit written results to ensure quality publication.

Machine Learning Intern Summer 2019
Whooo's Reading (Education Technology start-up) New York, NY
Support programming team's design and implementation of named-entity recognition model to encourage reading engagement among elementary- and middle-school students.

- Generate large, annotated, text-based training dataset to train machine learning model for named-entity recognition.
- Use trained Natural Language Processing (NLP) algorithm to generate reading quiz questions for early readers.
- Refine training data and parameters to improve quiz content and auto-grading accuracy.

Research Assistant Spring 2019
Williams College Computer Science Department Williamstown, MA
With Professor Daniel Barrow's research team, develop parser and user interface for an imperative programming language environment that combines an interactive visual drawing canvas and a text editor in an innovative method for teaching children how to code.

- Update visual drawing canvas parser, implemented in TypeScript, to improve user experience based on user testing and feedback.
- Improve language parser accuracy and reduce bugs based on bad user input.

ADDITIONAL EXPERIENCE

Personal Trainer January 2023 - May 2023
The Resilient Strength Oakland, CA

- Establish rapport with and develop exercise programming for clients.
- Guide individuals and groups through barbell- and bodyweight-based work out.
- Maintain inclusive and motivating gym culture through athlete-coach relationships.

EDUCATION

B.A., Computer Science and Mathematics June 2021
Williams College Williamstown, MA

- Graduated *Cum laude* and with honors in Mathematics
- Relevant coursework: Algorithms Design, Software Development, Programming Languages, Applied Real Analysis, Data Analytics, and Regression and Forecasting

PAPERS AND PUBLICATIONS

"Affirmative action, critical mass, and a predictive model of undergraduate student body demographics," PLOS ONE, May 2021

"Teacher-student race match in California Public Schools," Senior Honors Thesis in Mathematics, Williams College, May 2021