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# Travis Neils

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## APPLIED RESEARCH

### Microsoft Support Site

Jan to June 2021

Worked with other students and Microsoft employees to designed and implement research on the sites userbase and pain points for my capstone project. I conducted interviews and a survey, then formulated design recommendations and personas from the analyzed results.

### Network Growth Visualization

Dec 2020 to June 2021

Built a pipeline to transform gigabytes of review data into customized interactive network graphs using the Python libraries SQL alchemy, Pandas, and Altair.

### Visualization User Study

Oct 2020 to Jan 2021

Built interactive dashboards to help authors understand their reviews. Conducted interviews to assess visualizations' influence. Implemented web scraping to collect authors reviews.

### Author Reciprocity

Oct 2020 to Jan 2021

Conducted statistical analysis to study how the type of reviews authors received changed their behavior. Used R, Python and SQL.

## EDUCATION

### University of Washington

Sep 2017 to June 2021

Major: Human Centered Design and Engineering

Research with field studies, surveys, interviews, and usability tests. Designing personas, prototypes, and wireframes. Inclusion of Agile, technical writing and teamwork.

Specialization: Data Science

Covered data manipulation, cloud computing, statistical inference, machine learning, information visualization, web scraping and data ethics.

## DATA SCIENCE COMPETITIONS:

### Dengue Fever Spread Driven Data 2018

Predicted cases counts with mixed machine learning methods.

### Genetic Engineering Attribution Challenge 2020

Used a neural network to predict the source lab of a DNA sequence.

## CONTACT

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## Portfolio

<https://travisneils.github.io/portfolio2021/>

## SKILLS

Data Analysis in Python and R with ML, NLP, and Statistics.

Data Processing in Python with Pandas, Numpy and NLTK.

Data Visualization in Python, JavaScript, and R.

Signal Analysis in MATLAB, Python.

Proficiency with GitHub.

Experience with SQL, SQL++, Spark, Asterix, Database Design, Transactions.

Full stack web development with React and Firebase.

## INTERESTS

I follow the development of self-driving cars and of GPT-3.

I like learning about the process behind coding and library development.