Naitian Zhou

My ~~code is compiling~~ model is training...

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WORK EXPERIENCE

NBC News Digital
Fall 2020

Data Graphics Intern
Remote

Conduct **data analysis** and create **graphics** for data-driven stories at NBC News. Performed **K-spectral centroid** clustering on <u>Covid-19 case trends</u> to discover the different types of case trajectories states are facing.

UM College of Engineering
2020 - Present

Instructional Aide, Intro to Machine Learning
Ann Arbor, MI

Write homework assignment and prepare datasets and specifications for projects. **Teach** a classroom-size discussion section introductory machine learning material, including **SVMs**, **random forests, clustering,** and **mixture models**.

UM School of Information
2019 - Present

Research Assistant, Blablablab
Ann Arbor, MI

Work on **computational sociolinguistics** project investigating internet condolence speech using **Twitter and Reddit data** with Professor Jurgens in The Bringing together Language and Behavior for Large-scale Analytical Breakthroughs Laboratory. Paper accepted to EMNLP '20.

Information Sciences Institute
Summer 2020

Research Intern, Natural Languages Group
Remote

Conduct research with Prof. Jon May on applying improvisational comedy strategies to improve **dialogue systems** at the University of Southern California. Began project to incorporate **social dimensions** (like power) into dialogue agents.

Capital One
Summer 2019,
Summer 2018

Software Engineering Intern
McLean, VA

Created performance visualizations application using **Dash** and **pandas** to monitor **reinforcement learning model** used at Capital One. Automated **AWS** infrastructure with **terraform** and added step in data monitoring **step function** for geolocation data.

PUBLICATIONS

2020

Naitian Zhou and David Jurgens. "<u>Condolence and Empathy in Online Communities</u>." Proceedings of the Conference on Empirical Methods in Natural Language Processing (EMNLP), 2020

PROJECTS

Project Lead
Data Science Team
Fall 2020

College Football Prediction

Predicted college football game outcomes using both play-by-play data and game-level data. Techniques include **Bayesian methods**, **random forests**, and **logistic regression**. Still a work in progress, but rapidly losing faith in Wolverine football this season.

Author and Developer
Just for fun
Summer 2019

Cover Story

As part of a challenge, I used a database of book titles from Amazon and a **part-of-speech tagger** to construct grammatically correct sentences using only book titles. Earned an honorable mention from Randall Munroe, creator of XKCD.
"Press": https://blog.xkcd.com/2019/08/23/book-tour-and-contest-winner/
Link: https://covers.naitian.org

EDUCATION

2018 – 2022
3.952 GPA
B.S.E. Computer Science
B.S.E. Data Science
Linguistics Minor

University of Michigan, Ann Arbor

Intro to Probability and Statistics	Machine Learning	Face to Face Interactions
Intro to Theoretical Statistics	Data Structs + Algorithms	Intro to Semantics
Applied Regression	Comp. Sci. Theory	Intro to Syntax
Discrete Math	Applied Regression	Bayesian Data Analysis

STUDENT ORGANIZATIONS

The Michigan Daily
2020 - Present

Managing Online Editor

Contribute to **data driven stories** in the Michigan Daily using **D3.js** for interactive visualizations and **Python** and **R** for analysis.

Michigan Data Science Team
2018 - Present

Vice President of Projects

Generate, oversee, and advise on **data science projects** (2-3 each semester) that the Michigan Data Science Team undertakes. Work with **corporate sponsors** and the Michigan Institute for Data Science to organize **university-wide data challenges**.

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