

RECENT PROJECTS

The Conclusion of @realDonaldTrump (In Progress)

- Analyzed and visualized Trump’s tweets between Election Day (11/3/20) and the banning of his account (1/8/21).
- Used Python to create a serverless data scraping job via Github Actions to collect tweets daily.
- Leveraged AWS Comprehend to perform NLP (entity recognition, topic extraction, & sentiment analysis).
- Created interactive visualizations using Streamlit, allowing exploration of tweets based on user input.

Poodles and Doodles: An Applied Introduction to Bias in Machine Learning Systems

- Created a simple ML system that scrapes images via Bing and then uses a convolutional neural network to classify dogs as poodles or doodles.
- Used this system to demonstrate the ways bias can be introduced into ML systems, from data collection, to model training, to application.
- Covered concepts such as representation bias, historical bias, and self-reinforcing feedback loops.

EXPERIENCE

nCino

May 2021 – Present

Associate Software Engineer

- Develop scalable services on AWS to augment capabilities of the Salesforce platform.
- Participate in API design, development, and testing efforts to ensure backwards compatibility and reliability.
- Provide code reviews for fellow members of Scrum team.

May 2020 – May 2021

Subject Matter Expert + Technical Lead, Credit Analysis Support

- Served as technical lead for a team of 6-8 Support Engineers, overseeing technical training and escalations.
- Created documentation, tools, and templates to increase adoption of strategic features on the Salesforce platform.
- Guided implementation of early adopter programs for new features within the nCino product.
- Developed Apex scripts to mitigate technical debt and ensure seamless upgrades for client environments.
- Created and led department-wide training on software engineering skills for support engineers.

Support Engineer

May 2019 - May 2020

- Implement Salesforce automation tools to improve efficiency across client's business processes.
- Collaborate with stakeholders across departments to advise clients on change management and migration strategy.
- Curated a list of the most useful documentation, tools, and training into a wiki for new team members.

NOAA Earth Systems Research Laboratory

May – Aug 2018

Research Associate

- Completed research project, Trends of Surface Ozone Variability at Trinidad Head, CA in collaboration with NOAA scientists.
- Utilized R to construct pipelines to aggregate environmental data from various sources and intervals into a unified dataset.
- Created scripts to adapt the Hybrid Single Particle Lagrangian Integrated Trajectory Model to accept custom parameters.
- Implemented statistical decomposition tools to assess shifting seasonality in tropospheric ozone along the U.S. West Coast.
- Research presented at NOAA Science and Education Symposium, and featured in NOAA's Diversity and Science newsletter.

CERTIFICATIONS

Salesforce: Platform Developer II, Platform Developer I, Application Builder, Administrator

Amazon Web Services (AWS): Machine Learning Specialty, Cloud Practitioner

GIS: USGIF Geospatial Intelligence Certificate

TECHNICAL SKILLS

Python (Machine learning, data wrangling & visualization)
Typescript (AWS development)
Apex / Javascript / SOQL (Salesforce & LWC development)
Git/Github (version control)
R (scientific research, statistical programming)

EDUCATION

University of North Carolina Wilmington

May 2019

Bachelor of Science in Environmental Science, Geospatial Technologies minor

GPA: 3.8

NOAA Ernest F. Hollings Scholar

UNCW Honors College Merit Scholar

Undergraduate Research Ambassador