# **Alex Clark**

(585) 794-8614 • alexclark36@gmail.com • Github • LinkedIn

#### **EXPERIENCE**

#### **University of Rochester**

Rochester, NY

Senior Data Analyst, Pediatrics/UR Health Lab

May 2021 – present

- Developed visualizations in Tableau to convey alarm fatigue metrics across patient units.
- Utilized R and Python to create pipelines to wrangle and store data for visualization use.
- Developed an R Shiny application to share code across institutions for consistent SQL querying of electronic health records.
- Conduct user testing for Tableau visualizations.
- Collaborate with other institutions to gather data on PICUs for a consortium.
- Determines data requirements for projects including gathering and cleaning methods
- Determines the most appropriate format for users to consume the data (raw, tables, graphs, dashboards)
- Analyzes how a new solution interacts with or enhances existing solutions and how future solutions may benefit from the design

#### **Dixon Schwabl Advertising**

Rochester, NY

Data Engineer

November 2019 – May 2021

- Managed server maintenance including SQL server database creation, structure, maintenance, and inbound/outbound data flows.
- Leveraged Python to access, pull, manipulate, and store data from REST APIs.
- Monitored daily data connections to ensure reliability and accuracy.
- Collaborated with Data Architect, supporting the building and maintenance of complex database systems for business intelligence and marketing applications for Dixon Schwabl and clients.
- Integrated existing APIs and supported the development of new APIs for data transfer and customization.
- Leveraged R to automate the cleaning of +500,000 email addresses.
- Utilized Python to integrate data from contact management system to Salesforce.

#### **University of Rochester**

Rochester, NY

Senior Information Analyst, College of Arts, Sciences and Engineering No.

November 2018 - November 2019

- Used a mix of Cognos data warehouse and R to query complex data sets containing student, faculty, and course section data from multiple data sources.
- Utilized R to perform predictive modeling on application status.
- Interpreted data results into meaningful reports for senior leadership and department heads.
- Collaborated with the University-IT data warehouse team to perform ongoing data warehouse testing and refinement to ensure data integrity.
- Connected Tableau to Cognos data warehouse to enhance customized reports and automate the updating of reports for end-users.

#### **University of Rochester**

Rochester, NY

Senior Information Analyst, Business Intelligence

October 2016 - November 2018

- Leverage technical knowledge to improve efficiency of creating reports.
- Utilized R and Python to automate manual monthly/quarterly reports.
- Compile data to accurately answer questions for annual IRS and US News surveys.
- Led consultative meetings with department heads to discuss data needs and solve data issues.
- Worked daily with multiple large healthcare datasets.
- Developed dashboards in Spotfire for department heads and C-suite of URMC to use to gauge overall financial wellness of URMC and departments.

#### **EDUCATION**

### St. John Fisher College

Masters of Science, Data Science

December 2020

#### **DATA SCIENCE PROJECT EXPERIENCE**

### Tweet Predictor: **Shiny App**

- With a team, used R to model the data and create a Shiny app to predict the Twitter interaction metrics of a tweet as if Clinton, Trump, or Congress accounts tweeted the contents of a user-generated tweet.
- Created linear regression models from a corpus of Clinton, Trump, and Congresses tweets.
- Implemented models in a Shiny app to take a user generated tweet and compute the interaction metrics the tweet would receive based on the Tweeter.

## NFL Total Opportunities: Shiny App

- Scraped ProFootballReference.com player data to get every play for the season of the 2019 season.
- Cleaned data using R and created a Shiny app with visualizations to show the offensive efficiency by player.
- Illustrated how many opportunities each player received each week or through the whole season.
- Utilized advanced NFL metrics to map the average spot on the field a wider receiver is likely to receive a pass.