**Alex Clark**

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**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 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**](https://clarkbar36.shinyapps.io/DSCI644_Project/)

* 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**](https://clarkbar36.shinyapps.io/NFL_Total_Opportunities/)

* 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.