

ROBERT McALMON

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Github: <https://github.com/rgmcalmon>

SUMMARY

Certified Data Analyst with a Masters of Science in Mathematics. Effectively utilizes mathematical and programming skills to drive data analysis. An enthusiastic learner with an affinity for detail who enjoys finding elegant, organic solutions to problems. Industrious team worker and experienced teacher with a gift for explaining concepts to others.

TECHNICAL SKILLS

Languages: Python, Javascript, SQL, R, VBA, HTML, CSS.

Data Manipulation & Visualization: pandas, matplotlib, Plotly, D3.js, Leaflet.

Databases: MySQL, MongoDB.

Other: Git, Flask, command line.

PROJECTS

Examining Umpire Bias in MLB | <https://github.com/rgmcalmon/MLB>

- Modeled the probability of an umpire calling a strike and tested for significant changes based on whether the umpire and pitcher match on race.
- Conducted the statistical modeling; helped with the web-scraping and data cleaning.
- Model analysis done in Python using statsmodels and scikit-learn. Web scraping and data cleaning performed using BeautifulSoup and pandas.

Statewide Opioid Analysis | <https://statewideopioidanalysis.herokuapp.com/>

- Analyzed opioid prescription rates and death rates across the U.S.
- Managed the visualizations and contributed to the front-end development.
- Visualizations created using Plotly.js and Leaflet. Back-end created in Python using Flask-SQLAlchemy and a MySQL database.

ATX Crime Analysis | https://github.com/rgmcalmon/atx_crime_analysis

- Examined the correlation between crime rates and property values/population per zip code in Austin, TX.
- Managed and optimized the master code file, cleaned the data, and led the statistical analysis.
- Statistics and visualizations created using Python, pandas, and matplotlib.

WeatherPy | https://rgmcalmon.github.io/latitude_vs_x/

- Compared latitude to weather variables.
- Pulled city data using citypy and OpenWeatherMap API and applied regression analysis
- Statistics and visualizations created using Python, pandas, and matplotlib.

EXPERIENCE

Production Staff / Web Fulfillment

March 2019 – Present

Bumperactive.com; Austin, TX

Aug 2018 - Nov 2018

In charge of the production of mugs and buttons; coordinate with the production team and web fulfillment. Much of the work is high-volume, time-sensitive jobs for political candidates.

Lionbridge Technologies, Inc.; Waltham, MA

Oct 2018 – May 2019

Evaluate the utility of search results for mobile users according to strict and comprehensive guidelines. Determine the quality and trustworthiness of web pages. Undertook thorough research to justify the data provided. Complete tasks within a tight time frame.

Instructional Assistant / Lab Tutor

2014 – 2018

Texas State University; San Marcos, TX

Taught lab sections and gave lectures for Precalculus and Calculus II. Tutored lower and upper-division math/physics courses at the Student Learning Assistance Center and Athletic Academic Center. Graded quizzes and homework for Business Calculus, Linear Algebra, and Calculus III.

EDUCATION

Data Analysis & Visualization Certificate: University of Texas, Austin, TX || 2019

A 24-week intensive Boot Camp program focused on gaining technical programming skills in Excel, VBA, Python, R, JavaScript, SQL Databases, Tableau, Big Data, and Machine Learning.

Masters of Science in Mathematics: Texas State University, San Marcos, TX || 2018

Thesis: "Bruhat Order and Coxeter Hyperplane Arrangements"

<https://digital.library.txstate.edu/bitstream/handle/10877/7366/MCALMON-THESIS-2018.pdf>

Additional presentations: "How to Divide Polynomials with Multiple Variables & Solve Systems of Polynomial Equations" Oct 2017

Bachelor of Science in Mathematics: Texas State University, San Marcos, TX

Minor in Physics