Mike Mahoney

Analyst, Wayfair Inc.

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Qualification Summary

- Proficient in R, Python, SQL, SAS, and Shell programming languages, and combining these langauges to solve multifaceted data science problems
- Experienced with applying technologies including Docker and Git in data science contexts
- Passionate about data visualization and applying insights from large data sets to complex, real-world issues
- Work on data visualization featured in Towards Data Science (2019)

Professional Experience

Wayfair Inc.

Boston, Massachusetts

Analyst (Workforce Management - Forecasting & Analytics) *June 2019 - Present*

- Develop and launch department's first automated streaming data pipelines, connecting BuildKite, Docker, R, and database languages (T-SQL/PL-SQL) in order to create always-up real-time dashboards.
- Implement process improvements including automating long-standing reporting (dramatically increasing reporting speed and accuracy) and introducing Git and related workflows to department.
- Fill role as interdepartmental liaison between partner teams on matters of reporting methodologies, data availability, and data access.
- Serve as department subject-matter expert on technical matters (including R, SQL, Git, and Docker

Stella Riparian and Stream Ecology Laboratory

Syracuse, New York

Independent Researcher *September 2017 - June 2019*

- Spearheaded design and implementation of research plan, including data collection from almost 200 field sites, over 2,000 miles of travel by researchers, data analysis, and statistical modeling to predict beaver impacts in complex natural systems, using R, SQL, and ESRI GIS technologies
- Analyzed complex systems through use of statistical modeling and machine learning algorithms developed in R and Python
- Developed intricate data visualizations (using R's ggplot2 and Python's Bokeh) and detailed reports used to inform policy at the state level
- Invited to present results at Rochester Academy of Sciences (November 2018) and Forest Ecosystem Monitoring Collaborative Conference (December 2018)

Yanai Forest Ecosystem Science Laboratory

Syracuse, New York

Research Intern *September 2017 - April 2019*

- Analyzed quantitative and qualitative data in R, performing hypothesis testing, statistical estimation, and data visualization using non-parametric statistics in role as data analyst
- Improved data collection speed significantly by creating and implementing novel image analysis methods using developing technologies
- Presented results at Rochester Academy of Sciences (November 2017), Forest Ecosystem Monitoring Collective Conference (December 2017), and Society of American Foresters (November 2018)

Office of Student Involvement and Leadership – SUNY-ESF

Syracuse, New York

Head Orientation Leader *August 2016 – November 2018*

- Hired, trained, and directed 50 orientation leaders in implementing 10-day new student orientation program and semester-long student success series
- Presented to audiences of up to 1,500 students and family members on various topics chosen to aid in the transition to college
- Organized year-long interdepartmental planning process for subsequent year's class of incoming students

Education

State University of New York College of Environmental Science and Forestry (SUNY-ESF)

Syracuse, New York

Bachelor of Science with Honors magna cum laude in Forest Ecosystem Science *December 2018*

- Awards: Robin Hood Oak Award for Academic Excellence (2018), Robert M. Hicks Award for Academic Achievement (2018), Outstanding Student Award for Accomplishments in Field Ecology and Dendrology (2017), Outstanding Tutor (2016)
- Independent research presented at: New York Society of American Foresters (2019), Forest Ecosystem Monitoring Collaborative Conference (2017, 2018), Rochester Academy of Sciences (2017, 2018), Spotlight on Student Research (2018)