

Bryce E. Bowles

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Sample Work
bryce-bowles.github.io

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Objective

Experienced Data Scientist with experience in developing predictive models using Machine Learning (ML) techniques in R. Seeking a challenging role to apply advanced analytics solutions, addressing complex business problems and leveraging skills in machine learning, statistics and effective communication.

Summary

- 6+ years of proven experience in analytics with a focus on machine learning, statistical predictive modeling, feature engineering and data wrangling.
- In-depth knowledge of machine learning techniques for regression, classification, clustering.
- Proven ability to lead teams, guide professional growth, and ensure project excellence.
- Master's in Decision Analytics with a 4.0 GPA and extensive practical experience in real-world problem-solving.

Education

Masters of Decision Analytics (M.D.A.), GPA: 4.0

December 2021

Virginia Commonwealth University, Richmond, VA

- Relevant coursework: Data Engineering, Statistical Analysis, Optimization, Decision and Risk Analytics
- Phi Kappa Phi Honor Society (ΦΚΦ) member

B.S. in Business Administration (B.S.B.A)

May 2017

East Carolina University, Greenville, NC

Work Experience

Data Science Specialist

July 2022 - Present

NewMarket Corporation - Richmond, VA

- Developed predictive and inference models using R, .jmp, ML and statistical methods to optimize fluid formulations, resulting in reduced testing costs.
- Led cross-functional teams, guided team members through training and mentorship, ensuring project excellence and encouraging professional growth.
- Collaborated with business partners to design and implement machine learning projects addressing complex business problems.
- Applied machine learning techniques to structured and unstructured datasets, demonstrating strong analytical capabilities.

Virginia State Corporation Commission (SCC) - Richmond, VA

Senior Automated Systems Analyst (SCC)

February 2022 – July 2022

- Managed and directed multiple projects involving information systems and analytical tasks.
- Conduct descriptive, statistical and business intelligence analyses to solve business problems.
- Implemented an emailing API system, reducing cost and saving hundreds of work hours per year.

Automated Systems Analyst (SCC)

June 2018 - February 2022

- Administer new system implementation and lead critical projects.
- Improved the security of over 360K insurance agents' exam and fingerprint process by delivering BI dashboard analysis for key projects, resulting in increased consumer protection across the industry.

Associate Automated Systems Analyst (SCC)

June 2017 - June 2018

- Supported computer-based systems and system-related projects within the Bureau of Insurance.

Professional Experience (Sample Work - bryce-bowles.github.io)

NewMarket Corporation Data Science Mentor

May – August 2023

- Mentored and developed Data Operations' inaugural intern, enhancing their skills and delivering a Formulator Tool Kit predictive model.
- Integrated the intern's contributions into a larger project, showcasing their potential impact on company operations.

Oxidation Characteristics of Inhibited Mineral Oils

April 2023

- Developed a quantile regression forest predictive model for Afton's R&D CTS section, achieving an 80% prediction interval.
- Trained and deployed the model into a robust production RShiny application, enabling end users and formulators to predict outcomes and assess formula accuracy and precision.

FZG Scuffing Failure Load Stage Model

November 2022

- Developed a precise and accurate Random Forest predictive model to predict a driveline test (FZG Scuffing Failure Load Stage), achieving a 26.22% increase in prediction accuracy above the No Information Rate (NIR) and improved precision.
- Deployed the model to Afton's Formulator Tool Kit, enhancing product development for the "Driveline" business unit.

Skills

- Technical Skills:
 - Machine Learning (supervised and unsupervised): R, .jmp and Python
 - Regression, statistical inference, classification, clustering, feature engineering etc.
 - Data Wrangling: R and SQL - Data manipulation skills
 - Visualization: R, Shiny, MS Power BI - Create interpretable visualizations to tell a story and paint a vision
- Soft Skills
 - Problem-solving mindset
 - Clear interpretability presentation skills

Awards and Extracurricular Activities

Volunteer: NewMarket United Way Committee

May 2023-Present

- Collaboratively assisted in the planning and execution of NewMarket's United Way day, contributing to the organization's philanthropic efforts.

SCC Information Technology Committee Working Groups, Elected member of

May 2019-Present

- Data Analytics – Work as a team to improve analytics systems within the Bureau of Insurance.
- Communication – Assisted, produced, and wrote articles for the technology newsletters.

The Honor Society of Phi Kappa Phi (ΦΚΦ)

VCU - Richmond, VA

- Inducted Member November 2021
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