

Bryce E. Bowles

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Sample Work
[bryce-bowles.github.io](https://github.com/bryce-bowles)

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Summary

Analyst Professional with 4.5 years' experience. I build and implement systems and models that solve problems, drive strategic decisions and optimize business processes using descriptive, predictive and prescriptive analysis.

Education

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

December 2021

Virginia Commonwealth University, Richmond, VA

- Areas: Machine Learning, Optimization, Statistical Analysis, Predictive Modeling, Decision and Risk Analytics
- Elected into Phi Kappa Phi Honor Society ($\Phi\Kappa\Phi$) (*extremely high election standards*)

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

May 2017

East Carolina University, Greenville, NC

Skills

Tools

- | | | |
|------------------------------|----------------------------------|--------------------------------------|
| • Machine Learning Concepts | • Predictive Modeling | • Python (Pandas, Scikit Learn etc.) |
| • Decision and Risk Analysis | • Statistical Analysis (t-tests) | • R (Dplyr, tidyr, Ggplot2, etc.) |
| • Optimization | • Classification & Clustering | • SQL, SAP Crystal, KNIME |
| • Project Management | • Data Visualization | • Snowflake, Tableau, MS Power BI |

Work Experience

Senior Automated Systems Analyst

February 2022 - Present

Virginia State Corporation Commission (SCC)

Richmond, VA

Build, implement, maintain and support analytics and information systems that automate work tasks for the Virginia Bureau of Insurance (BOI) in support of insurance regulation.

- I perform data extraction (from large, complex databases), preprocessing, visualization, descriptive statistics, prediction and prescription analyses using a variety of tools to solve problems and enhance processes.
- Lead multiple projects involving implementing analytics systems, creating requirements, UAT and process improvements for several complex information systems while providing advanced technical assistance.
- Implemented emailing system to save the Bureau over \$300K and hundreds of work hours per year

Automated Systems Analyst (SCC)

June 2018 - February 2022

Serve as a Business Systems Analyst Liaison between the Bureau of Insurance (BOI) and Information Technology Division, assisting Automated Systems' Chief and Manager

- Administer new system implementation: Facilitate software developers and line of business throughout each project application development cycle such as collect requirements, vendor research/system design, configuration, implementation, quality assurance testing, managing security role access etc.
- Lead analyst for a section's largest project in over 30 years ([SB 1222](#)) improving security of over 360K insurance agents' exam and fingerprint process with the goal of protecting the consumer. Built and presented a gap analysis to stakeholders. Analysis was used to select the vendor and I conducted full implementation.

Associate Automated Systems Analyst (SCC)

June 2017 - June 2018

Support all computer-based systems and system related projects / processes utilized within the Bureau of Insurance

- Work and collaborate as part of a multidisciplinary analyst team to administer, troubleshoot and improve numerous annual & quarterly system related projects and processes.

Relevant Projects (Sample Work - bryce-bowles.github.io)

Classification and Predictive Modeling Analysis – Alchemy Insurance

December 2020

- Built, trained, validated, and tuned (for prescriptive measures) four classification models (classification trees, logistic regression, random forests, and support vector machines) to accurately predict insurance broker performance on gross written premium. Evaluated, visualized, and described five groups of brokers using principal component analysis.

Optimization Modeling - Federal Reserve Bank (FRB)

May 2020

- 1st place of 30 in model competition. Applied relevant theoretical math knowledge to a real optimization problem using real data. I worked collaboratively with the FRB of Richmond IT Vice President to collect data, consult and clearly present the report. Built high performing (*Python, Pyomo and GLPK*) network optimization model to simulate reorganization of 1700 employee workspaces across 17 floors, while allocating for changing project teams and requirements.

Predictive Modeling, Clustering, Classification and Optimization - Lending Club Loan Analysis

December 2020

- Applied theoretical math and modeling knowledge to develop a full analytics workflow on real data accurately predicting, classifying, clustering and optimizing. Wrote high performing code (*R & RStudio*) to perform data preprocessing, visualization, cluster analysis, predictive modeling, and learning-enabled optimization for an optimal expected return. Developed full analytics workflow to 1. cluster and evaluate Principal Component Analyses of borrowers 2. Accurately predict loan status and 3. optimize loan portfolio.

Awards and Certifications

The Honor Society of Phi Kappa Phi (ΦΚΦ)

VCU - Richmond, VA

Member

November 2021-Present

- Elected to be a member of the nation's oldest, most selective, and most prestigious all-discipline honor society. The extremely high election standards consist of class standing, GPA and good character. Membership is by invitation only to VCU's top 10 percent of graduate students. ([Certificate Link](#))

SCC Information Technology Committee Working Groups, Elected member of

May 2019-Present

- Data Analytics – Work as a team to improve analytics systems within the BOI
- Communication – Assist, produce and write articles for the technology newsletters

Data Camp Certifications

- AWS Cloud Concepts
- Data Scientist Professional Certification
 - Intermediate Python ([Certificate Link](#))
 - Introduction to Python ([Certificate Link](#))
 - Introduction to R ([Certificate Link](#))

March 2022

December 2021-Present