# **Bryce E. Bowles**

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# Sample Work

bryce-bowles.github.io

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## Summary

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

## **Education**

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

Virginia Commonwealth University, Richmond, VA

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

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

East Carolina University, Greenville, NC

May 2017

December 2021

# Skills Tools

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

# **Work Experience**

#### **Senior Automated Systems Analyst**

Virginia State Corporation Commission (SCC)

February 2022 - Present

Richmond, VA

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

- I extract data (structured and unstructured), preprocess, visualize, conduct descriptive statistics, predict and prescribe analyses using a variety of tools to solve problems and enhance processes and decisions.
- 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 API 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 dashboard 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

• 1<sup>st</sup> 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

March 2022

Data Scientist Professional Certification

December 2021-Present

- Intermediate Python (Certificate Link)
- Introduction to Python (Certificate Link)
- Introduction to R (Certificate Link)