

# JON-MARSHALL VAILE

## DATA SCIENTIST

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## ABOUT

I am currently transitioning from the role of Data Analyst and am seeking roles as a Data Scientist.

My first job out of college was as a paper filer. It wasn't a fun job, but it gave me time to think and to learn from the success of my peers. I learned how hard work, creativity, timing, and a bit of luck can help you create a career you're proud of. I look forward to sharing how this was true for me.

## TECHNICAL SKILLS

- Python (pandas, numpy, sklearn, matplotlib ...)
- R (tidyverse, dplyr, caret, ggplot2, shiny ...)
- SQL (T-SQL, PL-SQL, pgSQL, MySQL)
- Tableau (since 2012)
- Alteryx (since 2017)
- Git (github, bitbucket)

## SOFT SKILLS

- Public Speaking (for all levels through C-Suite)
- Teaching (twice-weekly analytics clinic)
- Leading (10-person project team)
- Self-Guided Learning

## BOOTCAMP HIGHLIGHTS

### BIG G EXPRESS PROJECT

- Vehicle fault early-warning system. Involved ANOVA F-test, feature engineering, logistic regression, precision, and recall.

### ALLIANCE BERNSTEIN PROJECT

- Key term extraction from financial filings using NLP and logistic regression: 93% success rate.

### MID-COURSE PROJECT

- Stock market analysis written in R and deployed as a web app using R Shiny.

### CAPSTONE PROJECT

- Python recommender system with content-based similarity search involving NLP, word vectorization, cosine similarity, PCA, and a front-end built using Flask.

## EDUCATION

### DATA SCIENTIST

2020 | Nashville Software School

### BACHELOR OF PSYCHOLOGY

2011 | James Madison University

### ASSOCIATE OF ARTS

2010 | Northern Virginia Community College

## TECHNICAL TRAINING

### DATA SCIENTIST | Sep 2019 – June 2020 | Nashville Software School

- Applied machine learning models to real-world problems. Models included regression (simple, multiple, ridge/lasso), classification (logistic, decision trees, svm, knn, nb), clustering (dbscan, k-means), and dimension reduction (pca, umap).
- Trained in coding best-practices using open source tools like Jupyter Notebooks, RStudio, pgAdmin, psql CLI, Neo4j, Git Bash.
- Developed Python, R, and SQL solutions using libraries and packages from the data science toolkit (pandas, numpy, matplotlib, scikit-learn, statsmodels, spacy, nltk, sqlalchemy, tidyverse, dplyr, caret, shiny, ggplot2).
- Development flow included managing and curating data, exploratory data analysis, presentation of findings, model development, model tuning, and version control with Git and GitHub.

## PROFESSIONAL EXPERIENCE

### SENIOR DATA ANALYST | Jul 2017 – Feb 2020 | The General Insurance

- Designed and implemented the corporate analytics environment:
  - Modeled and deployed the unified analytics data layer for the company using Python, SQL, and Alteryx in collaboration with Data Governance.
  - Led a ten-person team in the creation of the corporate analytics web portal on a \$1M budget. Features included daily revenue, expense, and new business trends across business channels, by geography, complete with comparisons to plan and forecast.
  - Set up Tableau and Alteryx Server environments and educated employees on their use.
  - Trained analysts and business users twice weekly in the use of analytics tools to gain insights and share data.
- Advised and educated using data:
  - Presented customer satisfaction results to management and advised on areas of potential improvement.
  - Identified costly outliers in vehicle rental data for the Claims Department.
  - Investigated data integrity issues involving claim payments and possible fraud. Presented findings to leadership and developed exception reporting to mitigate future occurrences..
  - Advised Executives on technical matters as a part of the Enterprise Data Architecture project.
  - Frequently requested on cross-departmental projects as a technical advisor and data SME.

### BUSINESS INTELLIGENCE SPECIALIST | Aug 2016 – Jul 2017 | State of Tennessee

- Led a project team of three in the creation of an executive dashboard for call center volume using SQL and Tableau.
- Acted as advisor and technical SME on business intelligence matters for the Data Architecture Committee.
- Developed complex SQL queries, Excel reports, and Tableau dashboards to support the ad-hoc needs of three departments.

### DATA ANALYST | Mar 2012 – Apr 2016 | NVR, Inc.

- Developed a scoring system to help the Director of Recruiting identify candidates with a high likelihood of 2+ year retention. With referrals scoring the highest, our CEO led a \$5K bonus initiative to any employee whose referral converted.
- Trained employees in basic, intermediate, and advanced SQL, Excel, and Crystal Reports methods.
- Researched, implemented, and enforced company-wide data collection procedures and best practices.