

## EXPERIENCE

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- **Jobox** Remote  
*Lead Data Engineer* *Aug 2021 - Present*
  - **Data Platform Architect:** Re-architect the Jobox data platform to use a modern infrastructure consisting of Python 3, Airflow 2, Redshift, Amazon EMR, Amazon Lambda, and Chartio. Migrate ETLs from previous environment, onboard other developers, and introduce good development practices like environment staging and data testing.
  - **Machine Learning Engineer:** Use company data such as location data and historical performance data to build and serve machine learning models for job scoring, demand forecasting, and job dispatching.
  - **Data Analytics and Modeling:** Build queries to serve business intelligence reporting and to answer ad-hoc questions for key stakeholders
- **Markel Corporation** Richmond, VA  
*Data Engineer* *Feb 2020 - Jun 2021*
  - **Reporting ETL:** Built system which extracts reporting datasets from various company SQL server sources and lands them in an environment for consumption by Qlik Sense applications. Project emphasis is on predictability of reporting project data loads, using source control to version changes to reporting projects, and logging to monitor and analyze load performance. All of team's major reporting loads now completely automated and monitored for validity with regression testing.
  - **Data Modeling:** Work with various Markel source systems to build data models for consumption by reporting datasets and applications. Write SQL queries to join disparate sources for business reporting applications.
- **C. Kenneth and Dianne Wright Center for Clinical and Translational Research** Richmond, VA  
*Research Data Analyst* *Jun 2019 - Feb 2020*
  - **Research Data Administration:** Help client researchers fulfill research data requests using Cerner and VCUHS databases. Interface with REDCap and LabKey for Electronic Data Capture and analytics. Perform deidentification of PHI as necessary. Drastically decreased request turnaround time by building a Python scripting library for common tasks. Built an ETL system for porting legacy longitudinal research data to LabKey to be used by researchers and stakeholders.
  - **Application Developer:** Work on various in-house application development projects as needed. Primarily involved with connecting APIs and services to front-end technologies and testing and improving user experience on client-facing applications.
  - **Informatics Mentor:** Work with VCU's Natural Language Processing lab faculty and teams of Computer Science undergraduate students on projects involving applications of clinical NLP. Teaching assistant for CCTR 690, VCU's graduate informatics seminar.
- **Virginia Commonwealth University** Richmond, VA  
*Graduate Assistant* *Sep 2017 - May 2019*
  - **STAT 314:** Help teach the STAT 314 - Applications of Statistics class at VCU. Grade papers, tests, answer questions, hold help sessions, and occasionally lecture.
  - **Statistics and Analytics Consulting Lab:** Student Assistant in the Statistical Consulting Lab. Work with primarily VCU graduate students and faculty to assist with research setup and analysis.
- **OneVirginia2021** Richmond, VA  
*Data Consultant* *Nov 2016 - Mar 2017, Feb 2018 - Jun 2018*
  - **Data Cleaning:** Write scripts to attempt to find human input error in company database, such as misspelled contact email addresses or mailing addresses. Able to recover nearly 2,000 contacts in company database who were not receiving communications due to input error.
  - **Automation:** Perform other automation tasks as needed. Write scripts to automate the creation of company documents such as thank-you notes, use browser automation to perform certain tasks such as filling out online forms that were previously done manually by volunteers.
- **Aftertouch Software** Richmond, VA  
*Owner and lead developer* *Jan 2015 - Mar 2016*
  - **AirPads:** Lead mobile developer for the iOS app AirPads, a virtual, wireless MIDI controller app. Manage production of the app, work with a designer, handle marketing and customer support.

## EDUCATION

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- **Virginia Commonwealth University** Richmond, VA  
*Master of Science in Operations Research* *Aug. 2017 – May 2019*
- **Virginia Commonwealth University** Richmond, VA  
*Bachelor of Science in Applied Mathematics* *Aug. 2011 – Dec. 2015*

## PROGRAMMING SKILLS

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- **Languages:** Python, SQL, R, HTML/CSS/Javascript, Swift
- **Technologies:** Scikit-Learn, Pandas, Matplotlib, Numpy, Tensorflow/Keras, Pytorch, MySQL, MSSQL, Oracle SQL, Postgres, AWS, Angular, ReactJS, Node.js, Qlik Sense

## CERTIFICATIONS AND AWARDS

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- **AWS Certified Cloud Practitioner:** Completed December 2019.
- **Mu Sigma Rho:** US National Statistics Honor Society. Recognizes outstanding academic achievement in statistics. Inducted May 2019.