

SKILLS

Data Science	Python, SQL, R, Tableau
Cloud	AWS, Microsoft Azure
Data Engineering	Docker, Kubernetes, Kubeflow, Jenkins, Gradle
Software Engineering	Java, C/C++, Solidity, HTML, JS, CSS, Version Control

PROFESSIONAL EXPERIENCE

Data Engineer <i>Freddie Mac</i>	Jul 2023 — Present <i>McLean, VA (Hybrid)</i>
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- Established an automated monthly report generation system of KPIs for supported data science teams and platforms
- Upgraded data platform infrastructure via AWS to expedite data ingestion, data pipelining, and data warehousing workflows
- Spearheaded the creation of custom Docker images used by various data science teams to enable faster onboarding of resources

Software Development Engineer <i>Amazon</i>	May 2022 — Aug 2022 <i>Nashville, TN (Remote)</i>
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- Improved business scalability and flexibility by revamping the Java back-end to allow API calls and DJS jobs to handle multiple data types
- Reduced AWS S3 bucket storage needs by 55% by enhancing prediction models to require a shorter time frame for generating similar forecasts
- Facilitated more targeted forecasting for different vendors by creating new data pipelines and migrating existing model data flows to new AWS databases
- Refined the onboarding process to accelerate ramp-up for future hires with detailed tech setup documentation

PROJECTS

Big Data: Politics on Reddit based on the Economy	Dec 2023
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- Conducted analysis on political subreddits to identify trends in user posts, comments, and interactions in parallel with changes in the U.S. economy
- ❖ **Techniques:** Data Mining, Data Wrangling, EDA, NLP, Sentiment Analysis, Linear Regression, Logistic Regression, Random Forests

MLOps: Credit Card Fraud Detection	Dec 2023
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- Coordinated the development and deployment of a machine learning app that detects fraudulent credit card transactions with an accuracy of 99%.
- ❖ **Techniques:** MLOps, EDA, Stacked Models

Data Visualization: Transportation Accidents in the U.S.	May 2023
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- Led a visual analysis on the U.S. transportation sector with interactive data visualizations of railroad and airplane accidents
- ❖ **Techniques:** Data Mining, Data Wrangling, EDA

Statistical Analysis: Hans Niemann Cheating Scandal	Dec 2022
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- Led a statistical analysis on a chess cheating scandal to provide insight on the validity of Magnus Carlsen's allegations against Hans Niemann
- Engineered statistical models to determine a player's legitimacy
- ❖ **Techniques:** Data Mining, Data Wrangling, EDA, Shapiro-Wilk, Kruskal-Wallis, Linear Regression, Multicollinearity tests, Bootstrapping, T-tests

Machine Learning: Gender Equality in the U.S.	Dec 2022
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- Analyzed gender equality in the U.S. by observing educational, occupational, and societal metrics with supervised and unsupervised machine learning models
- Gathered and cleaned structured and non-structured data from government sources and social media with Python and R scripts
- ❖ **Techniques:** Web Scraping, Data Mining, Data Wrangling, EDA, Naive Bayes, Decision Trees, Random Forests, SVM, Clustering, ARM, Networking

Media Playlist Simulator	Dec 2021
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- Launched a Spotify-like Flask app that stores users' log-in information and respective playlists of songs, movies, TV shows, and podcasts with Python and SQL

EDUCATION

Master of Science in Data Science and Analytics , <i>Georgetown University</i> , GPA: 4.0	Aug 2022 - May 2024
Bachelor of Science in Computer Science and Statistics , <i>Georgetown University</i> , GPA: 3.6	Aug 2019 - May 2023