

Alexander James Witt

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Summary

I am a results-driven data scientist who strives to create value from information. I committed over 1,600 hours to exploring and deploying advanced machine learning techniques. During this time, I tackled complex problems in data science such as predicting outliers within multivariate time-series and conducting topic analysis from user generated content. I'm looking for an opportunity to apply my expertise in Machine Learning with my robust suite of communication skills in order to provide stakeholders with actionable insights.

Key Qualifications

TECHNICAL SKILLS

- Programming Languages including Python, Scala and SQL
- Big Data and Cloud computing platforms such as AWS, Microsoft Azure, Apache Spark, and Databricks
- Web-App deployment with Flask
- Data manipulation libraries such as Pandas and Dask
- Computational libraries such as NumPy and SciPy,
- NLP techniques such as a vectorization, and topic analysis with spaCy, NLTK, and Gensim
- Geospatial Visualization with GeoPandas and Leaflet.js
- Machine Learning and optimization using scikit-learn, XGBoost, eli5, and SHAP/LIME
- Deep Learning with Keras and TensorFlow

Data Science Projects

INVESTMENT RISK ANALYSIS | AUGUST 2019 – PRESENT | GITHUB.COM/LABS14-INVESTMENT-RISK-ANALYSIS/DATA-SCIENCE

Created a predictive model to make equities investing simpler and safer by accurately assessing which market factors contribute to the risk of investing in a given company. Systematically broke down the movement of a company's historical stock market returns into its constituent factors using cutting edge Neural Network interpretability methodologies in order to diminish the overwhelming complexity of investment selection and reduce noise in the decision-making process.

BLACK SWAN 2.0 | JUNE 2019 | GITHUB.COM/BLACK-SWAN-2/BLACK-SWAN-2-MODELS

Detection of Three-Sigma events in the S&P500 market index using a bespoke Multivariate Time Series predictive model that produced results superior to standard industry models with 83% precision.

DATIFY | JULY 2019 | GITHUB.COM/DATING-SUCCESS-APP/DATA-SCIENCE

Created a REST API within a flask application that utilized Natural Language Processing methods to perform topic analysis using scikit-learn's TF-IDF vectorization and clustering with cosine similarity to predict match precision for disparate dating profiles. This API was then referenced by a Front-End team.

Education & Professional Development

DATA SCIENCE FELLOW | LAMBDA SCHOOL | 2019

36 weeks of Data Science coursework that includes Python, Data Sourcing and Wrangling, Statistics, Machine Learning, Neural Networks, SQL, Big Data Applications, End to End Software Engineering and Productization, Computer Vision, Generative Models, and Deep Learning.

CERTIFIED SOMMELIER | COURT OF MASTER SOMMELIERS | 2015

Underwent certification by the Court of Master Sommeliers, the leading authority on wine education. Certified as a skilled wine professional after passing tests in deductive tasting, theory of wine, and practical service.

B.A. IN MUSIC PERFORMANCE | AMERICAN UNIVERSITY | 2013

Classically trained trombonist with 15 years of experience. Highly skilled in sight reading, memorizing pieces quickly, improvisation, music theory, ensemble performance, and orchestration. Overall GPA: 3.6 | Major GPA: 3.93

Experience

LEAD BARTENDER | DEL MAR DE FABIO TRABOCCHI | APRIL 2018 – MARCH 2019

- Cultivated a strong and rigorous team culture that reduced turnover rates to 0% over the course of a year (Industry average is 47%)
- Delivered chef-driven, original cocktail lists every season using molecular gastronomy techniques
- Constructed and taught a revolving syllabus for spirits training delivered weekly to Front of House staff
- Consolidated and presented essential information to a staff of 30+ Front of House Employees during daily pre-shift meetings.
- Offered unmatched hospitality for hundreds of guests a night that created \$6 + million in annual revenue for a restaurant that was awarded:
 - No. 1 on the Washington Post Fall Dining Guide (2018)
 - No. 3 on the Washingtonian Top 100 (2018)
 - James Beard Award Semi Finalist for Best New Restaurant (2018)
 - Wine Spectator Best of Award of Excellence (2018)