Josh Kraus
Data Scientist

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(919) 889-1180
Chapel Hill, NC
[LinkedIn](#) | [Portfolio](#)

Education

M.S. Analytics
Georgia Institute of Technology
August 2022 - Present
GPA: 4.00, Anticipated Graduation: May 2024

M.M. Education
University of Florida
January 2020 - December 2021
GPA: 4.00, Summa Cum Laude

B.M. Performance
University of North Carolina - Greensboro
August 2016 - December 2019
GPA: 4.00, Summa Cum Laude

Skills

Programming
Python (Scikit-Learn, TensorFlow, PySpark, BeautifulSoup), SQL/MySQL, SAS, R, VBA, Javascript, HTML/CSS

Machine Learning
Supervised Learning (Classification, Regression), Unsupervised Learning (Clustering, Dimensionality Reduction)

Analytics Modeling
Statistical Modeling, Time Series Forecasting, Simulation, Data Mining

Data Visualization
Microsoft Power BI, Tableau, Python, R, D3.js

Essential Skills
Communication, Collaboration, Project Management, Strategic Planning, Creativity, Adaptability

Work Experience

Global Product Analytics Intern
Liberty Mutual Insurance
June 2023 - Present | Boston, MA
- Improved actuarial models for predicting loss cost by discovering and implement new variables for GLMs to more accurately project expenses.
- Optimized processes for analyzing data sets with over 10 million rows, utilizing SAS, SQL, and Python.
- Enabled faster decision making for leadership through synthesizing over 50 models by building dashboards in Power BI and workbook macros.

Founder & Analytics Consultant
Mindful Modeling
January 2022 - Present | Raleigh, NC | [Website](#)
- Improved the allocation of staffing resources for a high volume, high contact educational institution through data-driven solutions.
- Optimized staff scheduling for two student services organizations to efficiently meet demands by developing custom Power BI dashboards utilizing time series forecasts and historical trends of data from over 100,000 students.

Music Educator
Green Level High School
August 2022 - Present | Cary, NC
- Increased student learning by collaborating with colleagues, developing curricula, establishing goals, and teaching the fundamentals of music.
- Enhanced individual student growth by adapting teaching methods to address the varying needs of 50 students and effectively deliver material.

Notable Projects

Machine Learning for Medical Image Analysis
Built seven classification models in Python to identify pathology findings in 100,000 chest X-ray images and examined performance using ROC curves.

March Madness Bracket Analysis using Simulation
Developed and tested bracket strategies using 1000 Monte Carlo simulations, confidence intervals, hypothesis tests, and cumulative distribution functions.

Predicting Car Prices and Evaluating Offer Quality
Built a random forest model in Python to predict prices of 5.7 mil. cars, and displayed predictions to compare to offers in a dashboard built using HTML.

Identifying Profitable Airbnb Investments
Built and tuned a gradient boosting model to predict the profit yield of Airbnb properties in Python and identify listings above a profit threshold.