# Khaliil Bouda

# **Experience**

### Office of Graduate Engineering, UMD Graduate Research Assistant

- Applied Python and Tableau to analyze marketing and operational expenses, optimizing budget allocation and reducing costs by 16% in one year.
- · Developed data-driven admission insights by analyzing application trends in Python and automating Tableau dashboards, cutting processing time by 20%.
- · Led market research and demand forecasting for new engineering graduate programs, developing analytics-driven reports that helped secured funding and enabled successful program launches.

July 2023 - December 2024

### Freddie Mac - Master's Capstone Project Data Scientist

- · Led a team of data scientist students in extracting, cleaning, and modeling complex mortgage data using Python and statistical techniques
- · Built predictive ML models to assess 60-day loan default risk, identifying key factors influencing borrower defaults
- · Delivered final model and analysis to Freddie Mac analysts and their product team, providing insights to support their risk assessment framework and decision-making process

September 2024 - December 2024

### Information Technology, UMD Assistant Lead Technician

- · Promoted from General Technician to Assistant Lead, managing IT issues, hardware procurement, and optimizing store location using foot traffic data, boosting sales by 30% in one month.
- Redesigned IT workflows in ServiceNow and launched a training program, cutting resolution time by 25% and improving team performance.

September 2022 - May 2023

### Office of Graduate Engineering, UMD Communications Assistant

- · Enhanced social media strategies using data analysis, boosting follower engagement by 30% and increasing program visibility.
- · Managed and ensured the accuracy of student and alumni data in Excel, supporting outreach initiatives.

October 2021 - May 2023

# **Academic Projects**

## Airbnb Booking Rate Prediction Data Mining Project

Collaborated with a team of ML analysts to develop a supervised ML model predicting high-booking Airbnb listings. Analyzed rental trends to help hosts optimize location selection and pricing.

2024 Academic Year

#### **UMD Baseball Analytics** Database Management Project

Served as the lead database developer, designing a scalable SQL database and Tableau dashboards to enable a real-time performance metric analysis product.

data pipeline to centralize team and player performance data. Built gueries and

# Education

# **University of Maryland, Smith School of Business**

M.S. Business Analytics

December 2024

# **University of Maryland, College of Information Studies**

**B.S. Information Science, Data** Science Minor

### Relevant Coursework

Cloud Computing, Database Systems, Data Mining, Python Data Processing, Machine Learning

## Technical Skills

#### Certificates

Google Data Analytics Professional Certificate

#### **Programming & Data Querying**

Python (Pandas, NumPy, Scikit-learn, PySpark, TensorFlow), R, SQL (BigQuery, PostgreSQL, MySQL)

### **Analytics & Experimentation**

A/B Testing, Statistical Modeling, Causal Inference

#### Machine Learning & Al

Predictive Modeling, Feature Engineering, Supervised & Unsupervised Learning, Deep

### **Honors and Awards**

Dean's List: Spring 2022, Fall 2022, Spring 2023