

# WILL MIZER

## Education

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**BACHELOR OF SCIENCE | DATA SCIENCE** – Florida Polytechnic University – Lakeland, FL

Expected 5/2027

**ASSOCIATE OF SCIENCE | COMPUTER PROGRAMMING/ANALYSIS** – State College of Florida – Venice, FL 12/2023

## Skills

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**Python**

Libraries: pandas, matplotlib, seaborn, sci-kit learn

**Tableau**Interactive dashboards and visualizations  
Storytelling and filtering**R Programming**

Packages: dplyr, ggplot, tidyr

**SQL**Data cleaning, joins, query optimization  
Aggregation functions, filtering and group by**Microsoft Office**

Emphasis on Excel, VLOOKUP, pivot tables, basic formulas

**Hadoop**

Tools: HDFS, MapReduce, PySpark

## Projects

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**PYTHON | SQL: VIRGINIA HOUSING ANALYSIS** – Personal Project (2025)

- **Improved price prediction accuracy by 50%** (from  $\pm\$140K$  to  $\pm\$70K$ ) by switching from basic regression to a tuned XGBoost Random Forest model.
- **Built a predictive tool to estimate house prices based on square footage, acreage, location, and amenities, helping users evaluate build vs. buy options.**
- **Empowered family members with data-driven insights on home buying decisions in Virginia, increasing confidence in relocation choices.**
- **Enabled users to estimate future home values**, based on lot size and location, helping prospective builders forecast market-aligned pricing in target areas.

**PYTHON: MOVIE MATCHAI MOVIE RECOMMENDATION SYSTEM** – Personal Project (2025)

- **Boosted recommendation accuracy from 10% to 35%** by replacing TF-IDF with **SentenceTransformer** embeddings and tuning feature weights via Optuna.
- **Engineered a hybrid similarity model** that recommends similar movies based on cast, director, overview, genre, and themes using weighted cosine similarity.
- **Developed an interactive tool** that allows users to input a movie and receive personalized recommendations, solving a real-world group decision problem.
- **Led full ML pipeline development** from data cleaning and vectorization to model evaluation and fine-tuning using Python and scikit-learn.

**PYSPARK: END TO END DATA MOVIE PERFORMANCE PREDICTION** – University Project (2025)

- **Led end-to-end development** of a scalable PySpark pipeline to predict movie success using runtime, genre, budget, cast/director and various other metrics.
- **Enabled producers to simulate and assess** the commercial viability of movie ideas by inputting key features into a trained linear regression model.
- **Processed 70M+ IMDb entries** using distributed computing in PySpark, demonstrating scalability and real-world applicability.
- **Visualized prediction trends** and explained model outcomes with interpretable metrics, supporting data-backed greenlighting decisions.

## Work Experience

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### ONLINE DATA ANALYST – TELUS International

Nov 2023 – Apr 2024

- Reviewed and rated images, sounds and search results to **improve AI training data**, ensuring accuracy and relevance for machine learning models
- Securely worked while **maintaining data privacy** and **security regulations**
- Provided **detailed feedback** to enhance algorithm performance and optimize model accuracy
- Maintained a **high level of accuracy** and attention to detail in evaluating digital content

### SALES ASSOCIATE –The TJX Companies, Inc – Venice, FL

May 2021 – Mar 2022

- Managed the HomeGoods department, including rugs, lamps, and furniture, while maintaining a **high level of customer service**.
- Assisted customers with product inquiries and provided recommendations to improve their shopping experience.
- Ensured **inventory organization** and floor presentation met company standards.
- Worked very well with teammates and **communicated effectively** on what tasks needed to be accomplished.