# - MAX LOGALBO -

**Data Scientist | AWS Certified Solutions Architect | Advanced in ML Pipelines**

Orlando, FL 32766 • (847) 848-4368 • max.logalbo@gmail.com • linkedin.com/in/max-logalbo

Highly motivated and results-driven Data Scientist with a dual degree in Computer Science Engineering and Statistics from the University of Florida (GPA: 3.9, Cum Laude). Skilled in developing innovative statistical learning models and data-driven solutions to solve complex problems. Proven track record of delivering high-impact data solutions, demonstrated by creating an award-winning AI-generated face detector in a national data science competition. Passionate about driving insights, optimizing performance, and delivering impactful solutions in fast-paced, technical environments.

**Skills:**

- Languages: Python, R, SQL, C++, Java, JavaScript
- Cloud Services: AWS SageMaker, Redshift, Lambda, EC2, S3, DynamoDB, RDS, Athena
- Tools and Frameworks: Jupyter, PySpark, Tableau, PowerBI, boto3, scikit-learn, NumPy, Pandas, ggplot2, Git

## EDUCATION

**University of Florida** 2024
Bachelor of Science – Computer Science Engineering, BS in Statistics, Minor in Mathematics
Graduated Cum Laude (GPA 3.9)

## PROFESSIONAL EXPERIENCE

**Gaggle, Inc.** Remote • Machine Learning Intern 06/2023 - 07/2023

- Conducted advanced unsupervised learning analysis to extract actionable insights from large-scale, unstructured textual student data, driving improvements in classification accuracy
- Engineered a robust end-to-end data pipeline by integrating Sentence Transformer (SBERT) embeddings with dimensionality reduction techniques (PCA, manifold learning) and clustering algorithms (k-means), enabling precise identification of true positive data clusters
- Created a group-wide presentation using visualizations from ggplot2 to demonstrate the effectiveness of a classification model using n-shot SBERT embeddings and persuaded Chief AI Scientist to seamlessly embed it within the production workflow, significantly enhancing model efficiency and system automation
- Achieved 90% recall by optimizing seeding embeddings and cluster tuning, ensuring the timely identification of students in crisis, a critical metric for student support initiatives

**University of Florida,** Gainesville, FL • Statistics Teaching Assistant 08/2021 - 05/2024

- Led daily interactive discussions for 120+ students on foundational concepts in statistics, probability, and data analysis, fostering a collaborative learning environment and enhancing student comprehension
- Provided personalized, one-on-one academic support to students, addressing complex statistical concepts and guiding them through assignments, while efficiently grading 1,200+ lab reports per semester with a focus on accuracy and timely feedback

## PROJECTS

**AI-Generated Face Detector –** Python Paper

- Utilized Topological Data Analysis (TDA) for the detection of AI-generated faces
- Encoded 2500 gray-scaled images of faces using TDA methods as training data
- Conducted a grid search of 5 classifiers and associated hyperparameters and selected a support vector classifier with a radial kernel as the best method, generating an area under curve (AUC) of .943
- Awarded 3rd place in USRESP, a national undergraduate data science competition, in Spring 2024

**Rainfall Predictor –** R GitHub

- Cleaned and properly encoded 20 ordinal and quantitative rainfall variables for over 3 years of data
- Constructed an ensemble model with a random forest classifier (RFC), support vector machine (SVM), and k-nearest neighbors (KNN) to predict future rainfall with 85% accuracy and a 17% false negative rate

**Statistical Modeling Visualization Application –** R, RShiny, JavaScript Website

- Fabricated 4 applets to assist instruction on topics in statistical modeling, such as logistic regression, bootstrapped sampling, and cross-validation techniques

## ACHIEVEMENTS

**AWS Solutions Architect - Associate** November 2024
**Phi Beta Kappa Honor Society** May 2024
**President's Honor Roll (4.0 GPA)** December 2021, May 2022
**National Merit Scholar** December 2019