Aires Augusto Miguêns

📞 303 725 8668 | ✉ amiguens@wpi.edu | Linkedin | Github | Website

Objective

Master's student in Data Science looking for an internship or full-time job opportunity. Experienced in machine learning, deep learning, and predictive analytics. Passionate about applying AI to real-world problems, particularly in healthcare. Currently researching AI-driven healthcare solutions with Prof. Emmanuel Agu at WPI.

Education

• Worcester Polytechnic Institute (WPI), Worcester, MA | Master of Science in Data Science | Expected: May 2026
• Institute of Technology of the University of Luanda, Angola | BS in Telecommunications Engineering | Graduated: 2022

Skills & Tools:

• Programming: Python, R, MATLAB, SQL
• Machine Learning & AI:TensorFlow, PyTorch, Scikit-Learn, OpenCV, FaceNet, Hugging Face Transformers
• Big Data & Analytics: Pandas, NumPy, Seaborn, Microsoft Excel
• APIs & Cloud Tools: OpenAI API, MIDI API
• Other Tools: Jupyter Notebook

Awards & Achievements:

• Fulbright Award (2024–2026)
• 🏆 2nd Place Winner – MIT Media Lab Hackathon - Work Edition, May 2025

Work experience:

• Project Analyst & Supervisor | TECCPROENG | New International Airport of Luanda | Oct 2022 – July 2024
- Managed and analyzed large-scale construction project data, improving operational decision-making.
- Designed scalable solutions for real-time project tracking and reporting.
• Service Desk Specialist | SINFIC SA, Luanda, Angola | July 2021 – Sept 2022
- Conducted computer hardware and software troubleshooting both remotely and in-person.
- Managed large GIS datasets, ensuring accurate mapping of polling stations for national elections.
- Applied data visualization and analytics using Excel to monitor electoral process efficiency.

Research & Projects:

• Early Hypertension Detection through Voice Speech Data
  -Using Graph Diffusion Neural Network Model to make predictions and inferences from recorded voice speech data
• RNN-Based Music Generation (during MIT Deep Learning Training)
  Technologies: Python, TensorFlow, Keras, MIDI API
  - Developed an LSTM-based RNN model to generate music sequences based on classical compositions.
  - Used MIDI API to preprocess music data for structured model training.
  - Optimized model hyperparameters for improved music sequence coherence and originality.
• Facial Recognition Using Deep Learning (during MIT Deep Learning Training)
  Technologies: Python, OpenCV, TensorFlow, Keras, FaceNet API
  - Built a CNN-based facial recognition model for real-time face classification.
  - Integrated FaceNet API for feature extraction and recognition accuracy improvement.
  - Applied OpenCV for image preprocessing to enhance model performance on noisy data.
• Large Language Model (LLM) Chatbot (during MIT Deep Learning Training)
  Technologies: Python, PyTorch, Hugging Face Transformers, OpenAI API
  - Fine-tuned transformer-based LLMs for domain-specific NLP tasks.
  - Developed a chatbot using OpenAI API, improving response accuracy and coherence.
  - Applied model quantization techniques to optimize inference speed and reduce computational costs.

Languages

Portuguese (Native) | English (Fluent) | Spanish (High Intermediate) | French (Intermediate)