Edward Gaibor

857-395-2414 | gaiboriimeneziosue@gmail.com

Relevant Links: LinkedIn | GitHub | Website

Programming Languages: Python | Java | C | HTML | CSS | Javascript

Technologies: Sci-kit-learn | NumPy | Pandas | Flask | Matlab | Git | Joblib | ThingSpeak | Arduino | Jupyter Notebook | SSH | MatplotLib | Tkinter | WordPress | Vernier Graphical | VirtualBox | Open CV | Audacity | DiscordDev | Tawkto | Raspberry Pi Imager

| Tensorflow - Keras | Docker | Singularity | Slurm |

WORK EXPERIENCE & ORGANIZATIONS

MIT Research & Technical Intern @ "NoBrainer" Sensein Group | Website |

June 2023

- I developed scientific software for neuroimaging and other biomedical signals, including neural network models using Docker, Singularity, Slurm, and large language processing.
- I added a new feature that automated the handling of new neuroimaging models using GitHub Actions, Amazon's EC2 machines, and LinkML schemas, improving the workflow by 70%. Resulting in user interaction during the OHBM Hackathon and solving many GitHub issues contributing to the open-source tool.

Neuroimaging Research Sloan Fellowship @ UMass Boston | Website |

Jul 2023

- I had mentoring group sessions with two faculty members and a research assistantship with Ph.D. Daniel Haehn related to neuroimaging processing and machine learning frameworks such as XTK.js, Niivue.js, Cornerstone.js, Papaya.js, Tensorflow, and more.
- Participated in the 6-week "The Leadership program" by Umass Amherst and Harvard to improve project collaboration and negotiation skills.

CS460 – Graphics Programming Teaching Assistant @ Umass Boston | Website |

Sep 2023

- I mentored 30+ students and solved multiple issues related to XTK.js, Three.js, WebGL, and more.
- I graded and reviewed weekly homework assignments as well as give presentations.

Part-time web designer and Online course manager @ OrionSeg | Website |

2022-2023

- Designed and developed an online course website with *WordPress* with +300 students.
- Customer Service +100 chats and troubleshooting with *Tawk.to*
- Managed domain, domain security, and hosting.

Head of Hackathon activities @ CS Club Umass Boston

2022-Now

Active member of the club and organizer of UMass Boston's first-ever hackathon (Fall 2023)

EDUCATION & CERTIFICATIONS

University of Massachusetts Boston

Sept 2022 - Dec 2025

• Computer Science major with Dean's merit scholarship (\$14000 yearly). I achieved The Paul English Computer Science Scholarship and a \$5,000 Research Fellowship.

Certifications & College Courses | View more in: Website |

Introduction to Cybersecurity, Foundations of Cloud Computing, Machine Learning: Perceptrons, IBM: Machine Learning with Python, Building Deep Learning Models with TensorFlow 6-week Codecademy Skill Path, Build a Machine Learning Model with Python – 7 weeks Codecademy Skill Path.

Languages

• I am a native Spanish speaker and speak English fluently.

PROJECTS

Hydroponic IoT Greenhouse | Github | Paper | Website |

2021-2022

- I improved water consumption by +90% and optimized crop growth. Using 4.8L of water per lettuce compared to the 75L traditional crop. Accomplished second place in the national competition Junior Water Prize of Ecuador.
- I created a refill system for water reservoirs with Arduino (C++) and a 24/7 monitoring system of abiotic data using ThingSpeak with MatLab triggers.
- I participated in "Innovadores" Ecuador's innovation tournament, as an exhibition project, leading to the implementation of the project in my school's dining service, reducing \$50 in weekly spending and improving food quality.

6 Deep learning projects with Tensorflow | Github | Certification |

Jun 2023

• I did six projects related to deep learning, which include regression and classification, such as CNN model to predict Pneumonia via images, CNN model to predict galaxy type, Life Expectancy within countries, Medical Cost prediction with patient data, Patient survival rate, Air Quality predictor, and Forest Cover Type Classifier. As a result, I achieved a certification.

Interactive Exoplanet Predictor | Github | Website |

Nov 2022

- I predicted the number of planets based on the stellar characteristics using the Random Forest Classifier by scikit-learn algorithm, resulting in Systems with one star with a 98% Accuracy score.
- In collaboration, an extended version of this project was made available through a 3D front-end. Collaborator: Ayden Diel.

9 Machine Learning projects with Sklearn | Github | Website | Certification |

Aug 2023

• I did nine projects on developing models for Handwriting recognition, Titanic survival prediction, Baseball Strikes prediction, Tweet classification, Income prediction, Naive Bayes, Perceptrons, and more, using sklearn. As a result, I achieved a certification.

Streamlit, OpenAI, LLMs, LangChain "PDF GPT" | Github |

Aug 2023

• I built a multi-pdf analyzer and question-answer bot with five auto-generated preview questions.