Dylan Sebastian Ostolaza

(973) 714-3792 | dylan726@me.com

linkedin.com/in/dylan-ostolaza | github.com/swimdude | dylanostolaza.com

EDUCATION

Florida Institute of Technology, Melbourne, FL

August 2024 - May 2027

Bachelor of Science, Major in Computer Science, Minor in Computational Mathematics

New Jersey Institute of Technology, Newark, NJ

Sept 2022 - May 2024

Bachelor of Science, Major in Computer Science

PROJECTS

Image Caption Generator | Python, TensorFlow/Keras, NumPy, Matplotlib, NLTK

July 2025

- Built an end-to-end deep learning model that generates natural language descriptions for images
- Processed and tokenized caption data using Keras' Tokenizer, and trained using cross-entropy loss
- Achieved BLEU-1: 0.51 and BLEU-4: 0.08 scores after training on 6,000 images and 30,000 captions

Insurance Cost Prediction | Python, XGBoost, Pandas, Matplotlib, Scikit-Learn

July 2025

- Predicted insurance costs with XGBoost/Random Forest, reducing MAE by ~44% vs. linear regression
- Tuned hyperparameters with GridSearchCV (135 fits) to improve XGBoost accuracy and reduce MAE

Olympic Athlete Data Analysis | Python, Jupyter

June 2025

- Analyzed Olympic athlete data spanning 100+ years using Pandas, NumPy, Matplotlib, Seaborn and Jupyter
- Merged and cleaned datasets to analyze trends in athlete age, gender participation, and medal distribution
- Visualized the correlation between Olympic athletes' height and weight using scatter plots

CRM Application | Python, Django, MySQL

February 2025

- Developed a full-stack CRM application enabling users to register, log in, and manage customer records
- Reduced unauthorized access by 45% by implementing role-based access control and session management

Swim Time Calculator | Java

December 2024

- Designed a Java-based calculator with customizable event distances, and strokes that computes race splits
- Developed an interactive GUI for the calculator using Java, featuring buttons, dropdown menus, and images

Personal Portfolio | HTML, CSS, JavaScript

December 2024

- Deployed the site using GitHub Pages via git.io, achieving load times under 100ms globally
- Implemented custom domain configuration and optimized DNS settings for improved website accessibility

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

Division I Swimming

Fall 2022 - Present

- 2x CSCAA National Invitation Championship Qualifier & 2x School Record Holder
- Varsity Scholarship with a commitment of 20 hours per week
- Sunshine State Conference Commissioner's Honor Roll

President of Computing Honors Society (Upsilon Pi Epsilon)

Fall 2025 - Present

- Schedule and facilitate monthly meetings with interactive computer science related activities
- Volunteer one hour per week at the CS Help Desk, assisting students with coursework and debugging

Artificial Intelligence Club

Spring 2025 - Present

- Collaborated with peers on AI projects involving machine learning, computer vision, and deep learning
- Attended weekly meetings to discuss AI advancements, share project progress, and plan club initiatives

TECHNICAL SKILLS AND INTERESTS

Programming Languages: Python, Java, C++

Libraries & Frameworks: Pandas, NumPy, Matplotlib, Seaborn, XGBoost, Scikit-Learn, Django, TensorFlow, NLTK **Developer Tools:** Git, VS Code, Jupyter

Time Management: Able to balance training schedule with academic responsibilities

Interests: Fishing, American Currency Collecting, International Cuisine, Music, Board games / Strategy games