ANGELA KHRISTINE VALLEJO

B.S. Computer Science, M.S. Computer Science
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EDUCATION

New York Institute of Technology, New York, NY
M.S. Data Science
Sept 2022 - Dec 2023

New York Institute of Technology, New York, NY
Sept 2018 – May 2022
B.S. Computer Science
Cumulative GPA: 3.58
Magna Cum Laude

ORGANIZATIONS & LEADERSHIPS

***Vice President*,** Society of Women Engineers, New York Institute of Technology

Vice President of Finance, Alpha Sigma Tau Epsilon Iota Chapter

***Vice President of Organization Development*,** Alpha Sigma Tau Epsilon Iota Chapter

EXPERIENCES & RELEVANT PROJECTS

Python Programming Teacher **June 2024 – Present**

Fusion Education, Brooklyn, New York

- Improved beginner student role comprehension scores by 90% over 3 months through a modular teaching approach that incorporated Python activities of varying difficulty.
- Implemented Python programming curricula for beginners to advanced levels, focusing on core concepts such as loops, OOP, and algorithms, tailored to diverse learning needs of students.
- Guided students through hands-on projects, including real-world applications like sorting algorithms, data visualization, and basic game development, ensuring a practical understanding of Python principles.

AI Engineer Intern **Nov 2023 – Feb 2024**

RadicalX Co.

- Trained an XGBoost Model in Python to measure mouse metrics data between users.
- Implemented Random Forest, LSTM, and Gradient Boosting classification models for personalized and adaptive behavior analysis.

"PocDoc" Healthcare Analysis Chatbot App **Sept 2023 – Dec 2023**

College of Engineering & Computer Science, New York Institute of Technology

- Applied advanced NLP techniques (Semantic & Syntactic Similarity) to preprocess the dataset of symptoms and enhance the chatbot's ability to analyze user queries.
- Yielded more than 90% accuracy score after training and implementing KNN, Gaussian Naïve Bayes, Decision Tree, SVM using the trained datasets.
- Accomplished the integration of the ML model into a Flutter-based application using Dart.

Emotion Recognition with Support Vector Machine **Feb 2023 – May 2023**

College of Engineering & Computer Science, New York Institute of Technology

- Developed a facial emotion recognition system using the CREMA-D (Crowd-sourced Emotional Multimodal Actors) dataset.
- Successfully extracted facial landmarks, HOG (Histogram Oriented Gradients), and LBP (Local Binary Patterns) using OpenFace Library, resulting in a feature representation with an F-1 score of 0.82.
- Utilized SVM classifiers and performed 5-fold cross validation to fine-tune hyperparameters achieving an average precision of 0.88 across various emotional categories.

GRIP-2 Handwriting Analysis, Undergraduate Research & Entrepreneur Program **Feb 2022 – May 2022**

College of Engineering & Computer Science, New York Institute of Technology

- Collected a dataset of handwriting images (alphabet characters and symbols) from 6–9-year-olds with GRIP-2 prototype.
- Applied preprocessing methods including resizing, normalization, and noise reduction, enhancing the image quality by 20%.
- Developed research on implementing ensemble technique combining Convolutional Neural Networks (CNNs) and Support Vector Machines (SVMs) on existing GRIP-1 handwriting analysis research.

SKILLS

Languages **:** Python, Java, R, SQL, Javascript, CSS, HTML, MATLAB
Database Management **:** MySQL, MongoDB
Data Visualization **:** Tableau, RStudio, Matplotlib, Seaborn
Big Data **:** Apache Spark, Hadoop
Data Science **:** Deep Learning, Machine Learning, NLP, TensorFlow, CNN