

# 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

B.S. Computer Science

Sept 2018 – May 2022

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

*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.

*Falcon Insurance App*

Feb 2021 – May 2021

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

- Designed a car insurance app with a focus on user experience developed on Android Studio, utilizing the Waterfall Model within the SLDC.
- Implemented secure password hashing and encryption techniques to safeguard user credentials and user information.
- Utilized SQLite and caching strategies to store and synchronize data locally.

## SKILLS

**Languages** : Java, Python, 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