

## EDUCATION

**University of North Carolina at Greensboro** – Greensboro, NC

August 2022 - Present

*B.S. Computer Science, Data Science & Big Data concentration*

- GPA: 3.61
- Relevant Coursework: Big Data and Machine Learning (Python), Data Structures & Algorithms (Java), Concepts of Programming Languages (C++), Principles of Databases (PHP, SQL), Artificial Intelligence

**Central Carolina Community College** – Sanford, NC

August 2020 - May 2022

*Associates in Science*

- GPA: 3.22

## HONORS AND AWARDS

**UNCG Dean's List**

Fall 2022, Spring 2023

- Achieve a GPA of 3.50 or better, with no grade below B- for the semester.
- Be in Academic Good Standing

**Mountaire Scholarship**

August 2022

- Recipient must be a full-time student, involved in extracurricular activities or community, and higher than 3.2 GPA.

## SKILLS AND KNOWLEDGE

**Coding languages:** Java, PHP, JavaScript, TypeScript, SQL, Python, C++, HTML, CSS

**Languages:** English and Spanish

**Frameworks:** Spring, Yii, Laravel, Angular, Bootstrap

**Additional knowledge:** Express.js, Node.js, Git Version Control (GIT), REST API, Microservices Architecture, Agile Methodologies, Waterfall Methodologies, Scrum, MySQL, OOP, MVC, Maven, Linux, Unix, NumPy, pandas

## PROJECTS – GitHub - <https://github.com/c-lorenzo76>

**Raw data to Feature Space** 🔄

- Utilized: Python
- Extract features from a set of given raw data and construct a feature space/feature spaces to develop and train machine learning models for classifying birds: Cardinal, Sparrow, and Crow.
- Developed classifiers for the distinct categories of datasets and evaluated them by using qualitative measures. Regression-based modeling and Random Forest.
- Applied Principal Component Analysis (PCA) to the feature spaces created. Then generated new feature spaces using PCA to study the performance changes in confusion matrix.

**Track-A-Vax** 🔄

- Utilized: Yii Framework, PHP, MySQL, HTML, CSS
- A database system for Track-A-Vax, a vaccination tracking company, that tracks the administration of vaccines.
- Developed and maintained a relational MySQL database system, ensuring secure storage and retrieval of data in accordance with ER/EER data model for tracking the administration of vaccines.

**Restaurant Management App** 🔄

- Utilized: Spring Framework, Java, MySQL, HTML, CSS
- Designed an application that manages a restaurants day to day business.
- A management system for employees such as manager, chefs, and waiters to use.

**Binary Search Trees and AVL Tree** 🔄

- Utilized: Java
- Implemented: preOrderTraversal, postOrderTraversal, inOrderTraversal, binTreeLeafCounter, etc. for BST.
- Implemented: balance () and the 4 balancing cases for AVL Tree.
- Benchmarked time performances of insertion into empty BST and AVL Tree, Generating  $n$  random integers.  $N$  is some large number (e.g., 10000, 1000000).
- Benchmarked time performances of searching in the  $k$ -node BST and AVL Tree, Generating  $k$  random integers.  $K$  is also some large value.