# ANTONIO MEJIA

LinkedIn

#### **EDUCATION**

University of Michigan, BSE in Computer Science, Minor in Electrical Engineering

Aug. 2023 - Present

Email: anmejia@umich.edu

Cell: +1 734 255 5631

Awards: Engineering Scholarship of Honor, Dean's List & Honors

**GPA:** 3.9/4.0

Relevant Courses Taken: Programming & Data Structures; Intro to ChatGPT & LLM; Data Driven Web Apps; Discrete Math; Statistics & Data Analysis

#### Colegio Bolivar, Cali, Valle del Cauca

Aug. 2021 - May. 2023

**Awards:** Highest ICFES (Colombian National Examination) from the Class, Top 10% of Class, National Honor Society & Dean's List **Cumulative Unweighted High School GPA:** 3.8/4.0

### WORK EXPERIENCE

GPS S.A.S, Cali, Colombia, Android/Mobile Developer Intern

Jun. 2024 - Aug. 2024

- Developed a module for bus dispatch by scanning tickets and connecting to the respective bus server-side.
- Conducted in-field tests to ensure app functionality and reliability.
- Updated dependencies, ensuring compatibility with the newest server version which utilized multiple database schemes.
- Redesigned the app's layout to improve user experience, transitioning to a more user-friendly interface.
- Established a proposal to integrate Kotlin for future development.

Digital Blue, Ann Arbor, Michigan, United States, Software Developer Intern

May. 2024 - Jun. 2024

- Optimized a convolutional neural network (CNN) by reducing the number of layers, enhancing efficiency.
- Implemented an image downsizing algorithm, accelerating CNN processing and model retraining.
- Successfully improved CNN performance and reduced computational load through targeted optimization strategies.

University of Michigan Aerospace Dept., Ann Arbor, Michigan, United States, Software Research Assistant

Aug. 2023 - May. 2024

- Built and trained a Convolutional Neural Network to determine segments in an image that contain composite materials.
- Developed an automated MATLAB algorithm to determine the fiber volume ratio of a composite material employing local thresholding techniques and convolutional layers.

Rennorgy S.A.S, Yumbo, Colombia, Electrical Engineer Intern

May. 2023 - Jul. 2023

• Built 600V LiFePO4 batteries for electric cars, connecting systems of cells in mixed circuits. Constructed chassis of electric minivans designed to micro-feed Colombia's public transportation system.

Cali Software S.A.S, Cali, Colombia, Front-End Website Engineer & Inventory Manager

Aug. 2019 - Jan. 2023

- Proposed a website redesign and renovated the website employing HTML & CSS to improve the customer's experience & the UI.
- Used spreadsheet models to display and manage the inventory of the components.

#### PROJECT EXPERIENCE

Machine Learning Text Classifier, University of Michigan, Ann Arbor, MI, USA

Apr. 2024 - May. 2024

- Engineered a natural language processing app to automatically predict, with +95% certainty, the category of posts using machine learning.
- Implemented a "bag of words" model and a Naive Bayes classifier to compute the log-probability scores for post categorization.
- Strengthened understanding of recursive data structures and C++ templates by building a binary search tree and custom map container ADT.

Terminal-Based Text Editor, University of Michigan, Ann Arbor, MI, USA

Mar. 2024 - Apr. 2024

- Developed a terminal-based text editor with functionalities similar to Pico, nano, Emacs, and vi, including text insertion, deletion, and cursor navigation.
- Employed container ADTs, dynamic memory, and doubly-linked lists to manage the text buffer efficiently.

Fake News Detector Algorithm, Cornell University, Ithaca, NY, USA

Jan. 2023 - Aug. 2023

- Taught myself to code in Python and created a Fake News Detector alongside Kenneth Trinh, a Cornell University Electrical & Computer Engineering Student.
- Explored the overall structure of machine learning and neural networks.

## LEADERSHIP EXPERIENCE

Itutor Club, Colegio Bolívar, Cali, Valle del Cauca, Colombia, Tutor

Aug. 2021 - May. 2023

• Schooled fellow students in STEM areas of weakness -AP CS Advanced, Pre-AP Pre-Calc, AP Calc- to enhance their knowledge and educational performance.

## SPECIALIZED SKILLS

Programming Languages: Java, Kotlin, C++, C, Python, PHP, SQL, MATLAB, HTML & CSS

Programs: Git, Github, Visual Studio Code, Android Studio, IntelliJ IDEA, MyBatis, BlueJ, WordPress, CPanel, Excel, Word, PowerPoint

Languages: Spanish (native); English (fluent)