

ANDRE MELENDEZ

(915) 422-7858 | andre.melendez5835@gmail.com | github.com/Andre-210 | linkedin.com/in/andre-melendez | andremele.dev

EDUCATION

The University of Texas at El Paso | El Paso, TX

Bachelor of Science in Computer Science | Minor in Economics

Graduating: December 2025

Major GPA: 3.68/4.00

- Relevant Coursework: SWE Requirements, Operating Systems, Adv. Object Oriented Programming, Computational Architecture, Programming Language Concepts, Advanced Data Structures, Software Development Studio, Automata

El Paso Community College

Associates of Multidisciplinary Studies

Graduated: May 2022

Overall GPA: 4.00/4.00

WORK EXPERIENCE

Google

Software Engineering Intern | Orchestration Frameworks Team

May 27, 2025 - August 22, 2025

Mountain View, CA

- Designed and developed a suite of tools to help Android Framework engineers **analyze Android process relationships**.
- Extended **Android protobuffs** to capture key process metadata; contributions will deploy on **2B+ Android devices**.
- Wrote a **Python script** to decode Android protobuffs into JSON and integrated the output with **D3.js** for graph rendering.
- Developed an **Angular + TypeScript** web application that **renders process graphs with interactive features**.
- Enhanced Android Framework engineering workflows by **streamlining debugging** and **reducing repetitive manual tasks**.

PROJECTS

Docker Exploit Mapper (DEM)

Department of Defense's Cyber Experimentation & Analysis Division (DEVCOM)

January 2025 - December 2025

SWE Requirements

- Led a **team of 7** to design a web platform for penetration testers to assess and exploit Docker container environments.
- Integrating **Trivy**, **Grype**, and **Dockle** to analyze running containers for CVEs, misconfiguration, and compliance issues.
- Implementing container discovery and interactive topology mapping using **Docker API**, **Nmap**, and **Neo4j**.
- Enabling controlled exploit execution through tools such as **Metasploit** and **Gobuster**.
- Expected to save DEVCOM analysts **40+ hours** monthly by automating manual container vulnerability assessments.

Shakespeare Language Learning Model

Google Tech Exchange Program

May 2024

- Developed a character-level **LLM** in Python using a neural network to predict the next character in a sequence.
- Worked closely with a Google engineer to design and implement the model, ensuring best practices and efficiency.
- Utilized **Google Colab** and **PyTorch** for GPU access, and effective tensor management.

Gen AI Interior Design Web App

Google Tech Exchange Program

January 2024 - May 2024

- Created a web app that streamlines the creative process and reduces concept time for interior designers through AI.
- Implemented a dynamic UI featuring image generation of interior designs leveraging the **Vertex Vision AI API**.
- Worked with **BigQuery** tables to construct prompts for the **Vertex Vision AI API**.
- Implemented **CSS** and **HTML** components to utilize within **Python Streamlit**.
- App provided over **1000** unique images by combining **15** room types and **100** interior design styles for user inspiration.

PROGRAMS

Google Tech Exchange Program

Student

January 2024 - May 2024

Online

- Gained proficiency with **Google Cloud Shell**, for managing cloud-based resources and automating workflows.
- Established connections with Google employees/peers, gaining insights into industry practices and corporate culture.

COMMUNITY CONTRIBUTIONS

Keystone Heritage Park Restoration Project — Secretary

Insights & United States Environmental Protection Agency

August 2021 - May 2022

El Paso, Texas

- Managed a **\$10,000 EPA-funded project** to revitalize a local park using Hügélkultur techniques.
- Led documentation, equipment handling, and milestone tracking to ensure project success.

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, TypeScript, CSS, HTML, C, SQL, PHP, Assembly

Technologies: Git/GitHub, Figma, Protobuffers, Google Cloud Shell, Google Colab/Jupyter Notebook

Libraries and Frameworks: Angular, React Native, MySQL, PyTorch, Streamlit

Communication Skills: Spanish and English Fluent