# **David Armijo**

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#### **EDUCATION**

# **B.S** in Computer Engineering

Texas A&M University - College, Station, TX

May 2026 GPA: 3.802/4.00

## RELEVANT COURSEWORK

ECEN: Intro to Digital Hardware Systems Design (Verilog), Electric Circuit Theory, Signals and Systems (Filter Design and System Analysis), Computer Architecture (ARMv8, Verilog, Behavioral Testing Scripts), Physics Electricity and Magnetism CSCE: Data Structures and Algorithms, Intro to Operating Systems, Deep Learning

#### **EXPERIENCE**

#### PC Builder, Self-Employed, TX

June 2022 – Present

• Communicated with 5 clients to curate pc parts and built computers from them according to their performance expectations and budget constraints in a timely manner

## Volunteer Teacher, Steel City Codes Summer Virtual Camp, TX

June 2021 - July 2022

- Provided lessons to advanced programmers about data structures and sorting algorithms in Java and Python.
- Improved class participation by 30% by expanding and optimizing learning materials to be more effective in teaching programmers at all skill levels.

#### **PROJECTS**

#### Personal Virtual Piggy Bank, TAMUHack

January 2024

- Drafted an embedded system prototype designed to help with juvenile financial literacy which utilizes an ESP-32 microprocessor as the backend and a 4D Systems touchscreen display I/O device as the frontend within 24 hours in collaboration with four teammates.
- Developed USB and Wi-fi port communications between the ESP-32 and the display using the C programming language by importing libraries and implementing protocols and functions according to online documentation.

# Traffic Light Controller, Digital Systems Project

November 2023

- Designed Moore Finite State Machine (FSM) based on given parameters and identified the I/O on the FPGA.
- Implemented behavioral Verilog from the FSM by using flip-flops and counters, and simulated and synthesized the controller onto the FPGA board.

#### Monopoly Simulator, Personal Hobby Project

September 2021 – October 2021

- Designed the program by translating the original game's object traits and organized them into 1 interface, 8 object classes, and 4 data structures such as arrays, stacks, queues, and linked lists.
- Extrapolated the recorded data in output files to predict outcomes based on given parameters.
- Expedited the data collection and extrapolation process by over 900 times compared to doing it by hand.

#### **LEADERSHIP**

# Chapter Head, Steel City Codes, Houston, TX

July 2021 - May 2022

- Created computer science curriculum to effectively educate and inspire 22 students in an underrepresented middle school
  while managing limited resources.
- Coordinated with 3 volunteer teachers to assist in teaching Java and Python lessons to students.

## HONORS AND AWARDS

Hispanic Scholarship Fund, HSF Scholar

June 2022 - Present

• Selected alongside the 10,000 students from a broad and talented pool of applicants nationwide from 4 stages of review.

#### TECHNICAL SKILLS

Software: System C (Beginner), Linux/Unix OS and Shell, Verilog (Xilinx), Python (Intermediate), Java (Intermediate), C++ (Intermediate), GDB, Windows PowerShell (Beginner), Autodesk Inventor, Microsoft Office Suite, ARM v8 Assembly, Electronic measurement equipment (oscilloscope, multimeter, etc), LTSpice Simulation Bilingual in Spanish and English

## **INVOLVEMENT**

Institute of Electrical and Electronics Engineers (IEEE) Society of Hispanic Professional Engineers (SHPE) Society of Women Engineers (SWE) August 2023 - Present

August 2022 – Present

September 2022 – Present