# Aliyah Melendez

#### Contact

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www.aliyahcodes.com

github.com/aliyahscoding

## **Education**

2020 - Graduated August 2025

Texas State University - San Marcos, TX

- B.S. in Computer Science
- · Minor in Applied Mathematics

#### Relevant Coursework:

- Linear Algebra
- · Intro to Advanced Math
- · Intro to Network Science
- · Human Factors
- · Intro to Software Development
- · Probability and Statistics
- Calculus I & II

## **Technical Skills**

- · Coding Languages:
  - Python
  - 。C++
  - lava
  - HTML/CSS/JavaScript
- · Data Tools:
  - Pandas, NumPy
  - SQL, Power BI, Tableu
  - Excel (advanced formulas, charts, and statistics)
- · Software and Libraries:
  - · Git/GitHub, MATLAB, R,
  - Flask, REST, APIs
  - LaTeX
- Soft Skills:
  - Bilingual, fluent in English and Spanish
  - Team Collaboration
  - Organization
  - Communication
  - Research

### **Experience**

#### Mathematics Research Assistant - Texas State University Summer 2024 and Summer 2025

- Collaborated under Dr. Christine Ruey Shan Lee researching Khovanov homology and related algebraic structures.
- Cleaned, organized, and analyzed mathematical data. Presented findings to faculty and peers.
- Strengthened research documentation and cross-team communication through clear, technical reporting.

## **Digital Content Coordinator** - Complexity Gaming, Frisco, TX October 2021 - July 2022

- Managed digital communications and client relations for multiple gaming and esports talents.
- Used data insights to optimize engagement and consistency across content platforms.

#### **Library Assistant** - Reeves County Library, Pecos, TX May 2019 - August 2020

- Organized digital and physical collections, tracked circulation statistics, and supported patrons' inquiries.
- Improved workflow efficiency by categorizing and tagging digital resources for faster retrieval.
- Planned and hosted community events to promote library resources and encourage literacy among children and families.

#### **Animal Shelter Volunteer** - San Marcos Regional Animal Shelter November 2022 - December 2023

- Supported daily operations, data logging, and volunteer coordination.
- Promoted community engagement through organized, detail-oriented support efforts.

## <u>Campus Involvement</u>

Girls Who Code TXST - Member and Event Organizer | Fall 2022 - Spring 2024 Provided peer mentoring and organized inclusive coding workshops.

## **Projects**

#### Personal Portfolio Website - aliyahcodes.com

Built a personal portfolio website using HTML, CSS, and JavaScript. Deployed through GitHub Pages to my personal domain. Designed for responsive layout and accessibility. Hosts all coding projects.

#### Tiny Item-Item Recommender - Python

Created a minimal collaborative filtering demo using cosine similarity for item recommendations. Includes user-item matrix construction, similarity scoring, and top N output.

#### CSV Stats Parser - C++

Built a command-line tool to read and summarize CSV datasets (mean, median, mode, variance), emphasizing clean data handling.