

# Miguel A. Avilés Bonilla

(850) 716-3012 | [www.linkedin.com/in/miguel-a-aviles](https://www.linkedin.com/in/miguel-a-aviles) | [miguel4viles@gmail.com](mailto:miguel4viles@gmail.com)

## Education

### The University of Texas at San Antonio

August 2018 - December 2022

*B.S. in Computer Science:*

*Concentration in Software Engineering*

**Relevant Coursework:** Advanced Software Engineering, Application Programming, Analysis of Algorithms, Computer Organization, Computer Architecture, Cryptography, Data Structures, Data Science, Database Systems, Discrete Mathematical Structures, Machine Learning, Mathematical Foundations of Computer Science, Operating Systems, Principles of Cyber Security, Programming Languages, Systems Programming, User Interfaces

## Skills

**Programming Design:** Python, C, Java, HTML, CSS, JavaScript, TypeScript, SQL, C#, PHP, Bash & Shell Programming, Relational Databases, React, Docker, Node, .NET, API Services, Agile Software Lifecycle, Jira | **Environment Experience:** Linux, Unix, Vim, Windows, Visual Studio Code, Eclipse, Git/Github, AWS, Ubuntu, NGINX, JSON, Oracle | **Fluent Languages:** English, Spanish

## Projects

### Vinyl eStore

**Description:** Full-Stack web app hosted on AWS, functional eStore prototype that sells vinyls with the expected UI/UX features like product pages, navigation bar, shopping cart, filtered product search **Used:** AWS, Nginx, PHP, MySQL, HTML/CSS/JS, Bootstrap

- Used MySQL and PhpMyAdmin to manage all of the data on the site including user account information and product information
- Wrote and placed necessary status/alert messages for an easy navigable user friendly experience
- Ensured responsive design across all webpages on the site and guaranteed fluid rendering on devices of varying sizes.
- Exercised agile development practices
- Implemented the necessary constraints for verifying user input before making actual changes to the database

### Portfolio Website

**Description:** Made portfolio website that displays short "about me" bio and information about my projects **Used:** (HTML/CSS/JS)

- Used Github for development and Github Pages for hosting
- Ensured responsive design across all webpages on the site and guaranteed fluid rendering on different device sizes.

### Device Database & API

**Description:** Website/REST API hosted on AWS that allowed the user to interact with a MySQL database full of devices and add, remove, retrieve, update device record entries from it. **Used:** AWS, PHP, Nginx, MySQL, JSON, HTML/CSS/JS, Bootstrap

- Deployed application on an Ubuntu server with 1vCPU and 1 GiB RAM.
- Used MySQL and PhpMyAdmin to manage all of the data on the site (5 Million device records)
- Made modifications to database schema, making use of relational database practices, speeding up query time by roughly 80%
- User can call seven different API endpoints (Add, Delete, Update, Search, List, ViewDevice/File), tested HTTP calls using cURL
- Regularly monitored the cloud infrastructure, including backups, patches, and scaling

## Work Experience

### USAA - San Antonio, TX

Shadow Experience (January 2023)

- Gained substantial understanding of iteration planning, project organization, and agile ceremonies/methodologies
- Learned about data migration and the role of Functions as a Service
- Worked directly with a team of software engineers and proposed solutions for approaching database restructuring

### Gloria's Latin Cuisine - San Antonio, TX

Server, Roller & Host (August 2022 - December 2022)

- Learned the inner-workings of a fast paced restaurant environment and excelled in customer service
- Showed versatility by occupying three different positions during my short time of employment

## References

**Manuel Castillo | General Manager @ Gloria's Latin Cuisine**  
**Eric Torres | IT Mentor @ USAA**

210-451-5412  
619-721-8857