Miguel A. Avilés Bonilla

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Work Experience

Data Analyst I @ Clarity

San Antonio, TX (August 2023 - Present)

- Use SQL queries to build widgets, forms and data reports for medical staff as needed
- Part of the HIM (Health Information Management) Department but frequently meet with the IT Department as well to discuss information security protocols as well as sysadmin decisions

Shadow Experience @ USAA

San Antonio, TX (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

Education

UTSA - B.S. in Computer Science: **Graduated** December 2022
Concentration in Software Engineering

UTSA - M.S. in Information Technology   *Expected to Graduate* May 2025
Concentration in Cybersecurity

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, Voice and Data Security, Telecommunication Systems

Skills

Programming Design: Python, C, Java, HTML, CSS, JavaScript, TypeScript, SQL, C#, PHP, Bash & Shell Programming, Relational Databases, 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, Razor, SAP Crystal Reports **| Fluent Languages:** English, Spanish

Projects

Vinyl eStore (Spring 2023)

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

- 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.
- Implemented the necessary constraints for verifying user input before making actual changes to the database

Device Database & API (Fall 2022)

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

References

Eric Torres | IT Mentor @ USAA   (619) 721-8857
Shaina Coleman | HIM Director @ Clarity   (210) 593-2140