Jorge Escorza
Software Engineer

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LinkedIn - Github - Gitlab - Portfolio

Summary

Graduated from UNAM with experience in backend development, algorithms, cloud computing, cybersecurity and 3D environments. Passionate about game development and AI innovations.

Education

National Autonomous University of Mexico (UNAM)   Mexico City
Bachelor's Degree in Computer Science. GPA: 4.0/4.0 (9.7/10.0)   August 2020 - June 2024
Graduating with Distinction
Relevant Coursework: Algorithms & Data Structures, Software Engineering, Video Game Development, Web Development, Computer 3D Animation, Cybersecurity, Machine Learning

Experience

UNAM Film Library   Mexico City
Social Service, Video Game Development and 3D Animation   August 2024 - February 2025

- Redesigned UNAM Film Library's upcoming mascot in 3D using **Blender** and integrated it into a **Unity 3D** project (**C# programming**).
- Developed 100% of a third-person video game of the UNAM Film Library's mascot using Unity 3D and **Git** for version control.
- Produced a five-minute animation of the UNAM Film Library's mascot, including an original instrumental using **Reaper** and **VSTis**.
- Created 100% of the whole institution in 3D for the video game and animation environment.

Projects

Upcoming Steam Video Game   May 2024 - present
A game developed using Unity 3D, where the player navigates a haunted house as a ghost.
- Implemented all the programming logic and mechanics using C# and Unity's built-in physics.
- Made all the art for the characters and environment using Blender.
- Animated a short film to promote the video game in the future.
- Produced an original instrumental for both animation and video game using Reaper and VSTis.

Encrypted Database   April 2024 - June 2024
A database which encrypts sensitive hospital data using AES-256 encryption algorithm (CTR and GCM modes).
- Configured a **Virtual Machine** with **Debian 12** (**Linux**) to test the project.
- Created a relational database using the open source **MariaDB Server**.
- Encrypted this database using **Python** with the following modules: **PyCryptodome**, **MySQLdb** and **SecureString**.

AI for Sentiment Analysis on Social Media Data   October 2023 - December 2023
An AI where tweets are analysed to classify their possible sentiments using Machine Learning.
- Developed a machine learning model to analyse and classify social media posts into emotional categories.
- Employed Natural Language Processing (**NLP**) techniques such as tokenization, word embeddings and vectorization to process a supervised dataset for classification.

Cloud infrastructure deployment with Google Cloud   August 2023 - October 2023
A complete cloud-based infrastructure using Google Cloud Platform.
- Deployed four virtual servers applying Compute Engine: Web, Application, Data and Email server.
- Installed **Apache** and **PostgreSQL** for Web and Data server respectively.
- Set up **Mail-in-a-box** for the Email server and **Thunderbird** as a mail client to query our Email server.
- Managed domain registration using a free .tech domain via **GitHub** Student Developer Pack.

Microservices Architecture - Spring Boot API Development   February 2023 - June 2023
APIs to generate invoices for products purchased by clients implementing microservices architecture.
- Built multiple APIs: Product API, Customer API, Invoice API and Exchange-rate API (integrating CoinCap API) using **Maven**, **Java**, **Spring Boot**.
- Integrated REST APIs within a microservices architecture with a config-service, gateway-service, admin-service and Netflix Eureka server.
- Used **MySQL Server** to manage databases where I stored data from customers, products and invoices.
- Tested APIs using Postman to ensure correct functionality and performance.

Backend & Frontend for Software Engineering Project   February 2023 - June 2023
A simulation of an industry website which has a logging system using **HTML**, **CSS** and **JavaScript**.
- Designed a login and a registration form on the same page with CSS animations.
- Integrated **frontend** components with **backend** services.
- Emphasized design principles to create a user-friendly experience.

Skills

Technical: Java (Intermediate), C# (Intermediate), Python (Intermediate), C++ (Intermediate), C (Beginner), Blender (Advanced), Unity 3D (Intermediate), HTML (Intermediate), CSS (Intermediate), JavaScript (Intermediate), SQL (Intermediate), Git/Github/Gitlab (Advanced), Docker (Beginner), Windows/Linux (Advanced), Music Production (Intermediate), Video Editing (Advanced), PowerPoint (Advanced), Excel (Beginner).

Soft skills: Problem solving & critical thinking, teamwork, project management, adaptability, continuous learning, communication skills, empathy, proactivity, reliability, innovation and enthusiasm.

Languages: Spanish (native), English (Intermediate)