Rafael A. Espinoza

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EDUCATION

Boston College May 2024

- Bachelor of Science in Computer Science, Minor in Mathematics
- Relevant Courses: Algorithms, Intro to Data Science, Computer Vision, Linear Algebra, Robotics

EXPERIENCE

Advanced Paperworks Inc

El Paso, TX

Design Engineer Intern

June 2021 – August 2021

- Collaborated with engineers to update and improve production designs using AutoCAD. This involved studying the different procedures the Mark Andy machines would perform and modifying the instructions to be straightforward resulting in a 20% decrease in quality control errors.
- Utilized Microsoft Access to manage linked forms concerning inventory, quality control, and part management between the computer's networks.
- Constructed a website using WordPress and light CSS and HTML code with a store functionality of 12 products.

Boston College Law School

Boston, MA

Audio Visual Technician

August 2022 - Present

- Setup and dismantle audio and visual equipment for law school events hosting up to 100 people.
- Troubleshooted computer, projector, and speaker systems to resolve technical issues.
- Communicated and delegated hardware and maintenance requests across 3 different departments.

PROJECTS

Spootify

- Utilized Spotify Web API, OAuth2 authentication, and NumPy to analyze user's recently played tracks and gather audio feature data.
- Retrieval of audio feature data included valence, danceability, energy, and liveness.
- Analyzed data to determine overall mood and generated visualizations using Matlab to find different trends amongst the data.

Fashionista

- Trained a Mask R-CNN model for object detection and classification in fashion images using the iMaterialist Fashion 2019 dataset.
- Collaborated on a three-person team to implement KFold cross-validation technique, applied data augmentation techniques, and trained the model.
- Led the evaluation of the model's performance on the validation set by acquiring the best weights and plotting the accuracy and loss over the training epochs.

ACTIVITIES

Computer Science Society (Boston, MA)

Fall 2021 – Present

Marketing Team Member and Sponsorship Coordinator

- Developed and implemented social media advertising strategy for school events, resulting in an increased attendance from the student body.
- Networked with BC alumni and utilized resources from the BC Career Center to secure ~5 sponsorships for club events such as our yearly hackathon.

Coronado Robotics Club (El Paso, TX)

Fall 2018 – Spring 2020

• Designed, constructed, and programmed robots in C++ with diverse capabilities for annual competitions, including a robot with a robotic claw capable of collecting moving objects from a body of water.

SKILLS & INTERESTS

Coding Languages - Java, Python, Verilog, HTML, CSS, SQL and C

Technologies – Matlab, PyTorch, Numpy, Pandas, Json

LinkedIn Certifications – SQL Essential Training, Python Structures and Algorithms

Languages - Native Spanish Speaker

Interests - Fishing, Hiking, Camping, Basketball, Weightlifting, True Crime, A24 Studios, Art, and Computer Vision