Arturo Diaz

Software Engineer

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LinkedIn Profile
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About Me

Aspiring Software Developer driven by a passion for crafting innovative solutions and pioneering efficient applications of AI technology. Proven track record of an unyielding drive and rapid skill development. Knowledgeable in full-stack development, agile methodologies, and problem-solving. Strong ability to collaborate with cross-functional teams and adapt to changing project requirements. Committed to continuous learning and propelling myself above and beyond the competition.

Skills

Python

Agile

VB.Net

C / C++

HTML

MySQL

Linux

XAML

Bash

Languages

English

Spanish

Work Experience

Software Engineering Internship — Jan 2024 - June 2024

2 Minute Warning

- Utilized Python's PyQt5 and OpenCV libraries to create new AI development features.
- Extended existing codebases with new features that balanced performance, scalability, and code maintenance.
- Participated in code reviews, implemented validation plans, and contributed with industry-standard Agile methodologies and DevOps practices.
- Utilized data-driven insights to address compliance and customer is- sues in an on-call engineering (OCE) model.

CAD Support / Programmer — Apr 2021 - Now

Bulk Handling Systems

- Developed advanced workflows using VB.net in Visual Studio under an MVVM only architecture.
- Updated company UI design, enhancing user experience and usability in XAML.
- Managed company data by creating reports and utilizing MySQL to organize and analyze information effectively.
- Acquired comprehensive knowledge of the CAD process in under a year, demonstrating a strong ability to learn new skills independently.
- Now overseeing and managing all current sales models.

Education

University of Oregon — Fall 2024 Graduation

Major: Computer Science
Minor: Sociology

- Deans list for six terms in the past 3 years. CS GPA: 3.76, Cumulative GPA: 3.48.
- Relevant coursework: Machine Learning 472, Linear Algebra 341, Statistic Models and Math 343, Computational Science 410, Principals of Programming Language 425.

Projects

White Hat Detection - 2MW

This project aims to detect label head referees by their white hats within frames. It begins by isolating regions of interest (ROIs) likely to contain referees. Using a trained YOLOv8n-seg model, the AI model predicts referee contours within these ROIs. It then segments these regions based on the contours. Custom logic discerns referees wearing white hats, updating ground truth labels accordingly. This process of ROI extraction, to segmentation and attribute analysis, streamlined the labeling of head referees for our labeling team.

AutoCAD Application Deployment - BHS

I engineered a VB.net installation deployment in Visual Studio for CAD-related applications, featuring a dynamic MVVM architecture enabling unbinded variables to interact with the XAML UI, resulting in a modern, efficient design. This streamlined solution significantly reduced setup time from 6 hours to under 2 hours, simplifying the process and ensuring scalability and rapid deployment.