# **OMAR CRUZ PANTOJA**

Software Engineer with 3 years development experience and 3 years of undergraduate research experience in Machine Learning (ML). Looking to join a team with engineering challenges along with friendly developers. I enjoy participating in cross-functional team efforts and learning new technologies. As a developer I strive for well-rounded architectural designs and solutions to problems.

#### CONTACT

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in Omar cruz

#### **SKILLS**

#### **Programming Languages**

Ruby
Python
Javascript
HTML/CSS
C#
C++

#### **Tools and Frameworks**

Ruby on Rails React/Typescript Github FastAPI



#### **Operating Systems**

Linux Windows



I do not consider myself OS developer, rather I have developed using these OS.

#### DevOp Tool

#### **Jenkins**

#### **Kubernetes**

I have not developed using these tools, rather I have used them during development.

#### Languages

#### Spanish (Native) English



<sup>\*</sup> The skill scale is from 0 (Fundamental Awareness) to 5 (Expert).

#### WORK EXPERIENCE

#### Software Engineer III

1 01/2020 - Present

**♀** Elsevier (Shadow Health) - Gainesville, FL

Ruby on Rails React Github Jenkins Kubernetes Python

As a full stack developer maintained, updated and tested homegrown Learning Management Software (LMS) for healthcare simulation products and its dependencies in agile scrum framework. Following are some of the projects I pioneered and led.

- Redesigned and refactored data structure and UIs for assignment results templates.
   Standardized unity game state reports, allowing standard parsing of data to generate student scores, standard results template rendering (with dynamic rendering) and improved communication between engineering team and game developers (due to the standardized nature of data structures).
- Pioneered the rewrite of an application to Python FastAPI, improving its stability by "dockerizing" the service, testing capabilities by isolating properly databases based on working environments (local/dev/staging...ect) and reduced application response time by refactoring overheads identified in the application's middleware.
- Automated processes allowing engineers to be more productive, focusing on working in newer tasks rather than repeated tasks. An example of such was the creation of an automation that would attach images in AWS S3 buckets to its corresponding interface, whilst automatically updating image listing when new images added to S3, preventing the need of code base updates and its necessary review when a new image was added.

#### **Software Intern**

01/2018-04/2018 | 09/2019 - 12/2019

VariantPR - San Juan, PR

.NET Core (C#) | Javascript

- Created API endpoints to request and store images into a .NET Core hosted server.
   Images stored were served into a virtual image gallery.
- Using JavaScript, created algorithm to auto generate dynamic gallery format. The gallery allowed randomized image sizes within a grid. On this project I had the opportunity to work on both front and back end.

#### RESEARCH EXPERIENCE

#### Finding the best features to track for SLAM

**6** 06/2019 - 08/2019

**Q** University of Florida Mechanical Engineering Department

Python Machine Learning

Used neural networks to identify key pixels and segment objects in RGB images to estimate robot localization relative to its motion. Development was done in python in a linux environment.

# Clustering and classifying "Coqui"sound speeches with Machine Learning algorithms.

10/2015 - 05/2019

**Q** Dr. Carlos J. Corrada Bravo- University of Puerto Rico Rio-Piedras Campus

Python | Machine Learning

Used clustering algorithms to identify animal species vocalization speeches in audio files and applied machine learning algorithms to classify speeches found.

## **EDUCATION**

## **B.S. Computer Science and Mathematics Major**

**6** 08/2014 - 05/2019

**♀** University of Puerto Rico, Rio Piedras Campus

Magna Cum Laude, 3.82 GPA