Johan Guzman

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EDUCATION

Bachelor's Degree in **Computer Science** | Current GPA: **3.80** University of California, Riverside (UCR), Riverside, CA

Expected June 2021

SKILLS

- **Programming Languages**: C++, Python, Java, HTML, and CSS
- Platforms: Github, Windows, and Linux
- Language: Bilingual, English, and Spanish

PROJECTS

ThErapy Screening, Github Repository

July 2019

- Developed an Android app meant to improve the collection of information from Child Therapists' patients using Android Studio, **Java**, and XML files
- The purpose of the app is to collect information (names, ages, etc) from patients (parent and child) as well as their answers to a questionnaire. The information and answers gathered are used to generate a report which is sent to the therapist's email
- Used **Google's Firebase** service to implement the authentication functionality of the app which allows a therapist to sign in with his/her Google account

Portfolio Website, Github Repository

June 2019

• Developed a website that serves as a portfolio to present me, my passions, projects, and skills. Used **HTML** to structure the body of the website and **CSS** to style and embellish it. <u>Link to website</u>.

Metal Finder Robot, CS/EE 120B Intro to Embedded Systems Final Project, Github Repository

May 2019

- Developed a motorized, four-wheel robot capable to travel and detect small metal objects on its way by using an ATMega1284 microcontroller to control the signals coming from its motors, ultrasonic sensor, and inductive sensor
- Implemented the functionality of the robot using **Concurrent**, **synchronous state machines** and **C** programming language in order to make it behave intelligibly after detecting a metal object or a potential obstacle in front of it.

Rshell, CS 100 Software Construction Project, Github Repository

May 2019

- Worked with a class partner on the development of a C++ program that simulated the functionality of a command shell by applying **object-oriented programming principles** and **software design patterns**
- Achieved the proper functionality of the program by parsing and analyzing user Linux commands, decomposing the commands into appropriate objects, and executing system calls.
- Verified the functionality of the program by performing unit testing on individual components of the program using **Google Test**Framework for C++ and integration testing on the whole system using bash I/O

WORK & VOLUNTEER EXPERIENCE

Elementary School Tutor, Myra Linn Elementary School, Riverside, CA

January 2019 - May 2019

- Tutored 30 elementary schoolers on math and reading by maintaining a safe and interactive learning environment
- Improved the reading comprehension of students with low reading levels by effectively inculcating reading habits
- Assisted the STEM after school team by teaching twenty students basic programming skills using Python

Community Service Volunteer, Habitat for Humanity, Riverside, CA

January 2015 - June 2017

• Improved the housing conditions of low-income communities in Riverside by operating landscaping work and painting of walls of houses in poor conditions with the help of other twenty volunteers

HACKATHONS

RoseHack, Cameo Card Game

February 2019

- Worked with a team of 4 students in the development of a card game using Android Studio
- Designed the user interface of the game using Android Studio tools and XML files manipulations

HONORS & AWARDS

• UCR Dean's Honor List (3.5 GPA or better): Freshman year & Sophomore year