

# Alexander Ortiz

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## EDUCATION

### UC RIVERSIDE

BS IN COMPUTER SCIENCE

Expected Graduation Date: 2017

Status: Junior

Current GPA: 3.7

### RIVERSIDE POLY HS

Graduation Date: June 2013

## COURSEWORK

### UNDERGRADUATE

Artificial Intelligence

Database Management Systems

Software Construction

Software Engineering

## SKILLS

### PROGRAMMING

C++ - Proficient

SQL - Proficient

Git - Intermediate

Java - Intermediate

Python - Intermediate

Android - Beginner

HTML - Beginner

JavaScript - Beginner

PHP - Beginner

## GITHUB

<https://github.com/aorti017>

## EXPERIENCE

### PEOPLE'S CARE | TECHNICAL ANALYST INTERN

June 2014 – Sep 2015

- IT Support
- Troubleshooting
- Assist with network and security management
- Assist with the installation and implementation of new equipment
- Assist with end user system updates and monitoring (including patch management, Spyware, Malware, virus removal, and backups)
- Provide hands-on assistance with computers/servers, and the creation/documentation of IT systems and networks

## PROJECTS

### ANDROID MUSIC PLAYER

An Android application that scans the device's file system for music files. Displays the found files based on the files' metadata, and allows for the user to choose which metadata is used to sort. Music will continue to play if the application is not in the foreground. Features include: skipping songs, shuffling playback order, gapless playback, pausing and resuming playback.

### BASH SHELL IMPLEMENTATION

An implementation of the Bash shell written in C++. It uses the execv system call to emulate a terminal. It is capable of changing the working directory, redirecting input/output, piping input/output, handling signals and more.

### MUSIC GENRE IDENTIFICATION USING MACHINE LEARNING

Uses the SciKit Learn machine learning API to train various classifiers using lyric data taken from songs of different genres. Before being used to train, the lyric data goes through preprocessing to remove stop words and stemming. Uses a held-out portion of the training set to assess the accuracy of the classifiers' ability to predict a song's genre based on its lyrics.

### ONLINE MESSAGING APPLICATION

I am currently working in a group of six to develop an online messaging application. Using the LAMP stack, I set up and configured the Apache server the application is hosted on. Using JavaScript, MySQL and PHP, I created the system for sending and receiving messages. This system works through jQuery long polling a PHP script that returns messages as they are written to the database.

### PYTHON LIBRARY PARSES JSON FROM API FOR DATA

A Python library that pulls music data from <http://genius.com/> in the form of JSON data. Given either an artist or song ID, JSON data containing information about the corresponding ID is retrieved. The retrieved JSON is parsed for the information requested by the corresponding function call. It also allows for the search of song IDs based on an input query.

Source code for these projects and more can be found at <https://github.com/aorti017>.