Carlos Aguilera

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Education

University of San Francisco (USF)   Expected Graduation Date: **May 2017**

B.S. Degree: Computer Science   GPA: 3.69

Technical Skills

- **Programming Languages:** Python (Proficient), Java (Intermediate), C (Intermediate), JavaScript (Proficient), C++(Proficient)
- **Website/Design:** HTML/CSS
- **Terminal/Command Prompt:** Unix (Proficient) and Windows (Proficient)
- **Query Language:** SQL

Relevant Courses

Operating Systems   **Fall 2015**

- Analyzing the design and implementation of operating systems.
- Formed programs with threads, synchronization, scheduling, and interprocess communication.

Data Structures and Algorithms   **Spring 2015**

- Programmed data structures to collect information efficiently.
- Implemented complex algorithms in four separate projects.

Software Development   **Spring 2015**

- Conducted professional management of extensive lines of code.
- Designed and built back end of a search engine through several projects.

Parallel Computing   **Fall 2014**

- Programmed parallel programs using Message Passing Interface (MPI) and threads.
- Operated with Distributed and Shared Memory Computer Systems.

Notable Academic Projects

Back-End of Search Engine

- Developed an inverted index for fast search through html/text files.
- Improved program by parallelizing search algorithm.
- Molded a web crawler to grab html pages and index them.

Systems

- Programmed a shell on the Raspberry Pi.

Java REPL

- Developed a Java REPL, an interactive "shell" tool that mimics the behavior of the python interpreter shell.

C Declaration to English Translation

- A small translator that recognizes a subset of C declarations and prints out the equivalent English Meaning.

Personal Projects

AirHockey

- Implemented a simple air hockey game using javascript

Website

- Designed and implemented my own website in html and css.

Work Experience

USF Computer Science Department, San Francisco, CA

Computer Science Tutor   **August 2015 - Present**

Teaching Assistant (Introduction to Computer Science I and II)   **August 2014 - May 2015**