Jonathan **Candelaria**

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Seeking an entry-level position to further develop my skills in the area of computing and computing devices.

Education

University of California, Riverside

Aug. 2014 - Mar. 2017

Bachelor of Science in Computer Science

Related Coursework - Data Structures and Algorithms, Machine Organization and Assembly Language Programming, Circuit Analysis, Computer Architecture, Embedded Systems, Computer Networks, Database Management Systems, UNIX System Administration, Design of Operating Systems, Artificial Intelligence

Projects

Big Data Project - Python, Perl, SQL

Mar. 2016 - Jun. 2016

Senior Design

- Used Twitter API to collect roughly 40M tweets and perform sentiment analysis on top trending hashtags.
- Wrote python scripts to collect tweets and perform sentiment analysis on dataset.
- Wrote Perl script to parse through collected tweets and create .csv files to be used in SQL database.
- These scripts and queries allowed teammates to create heatmaps of hashtags based on positive/negative sentiment using Google Maps API.

Messenger Database System - PostgreSQL, Java

Jan. 2016 - Mar. 2016

Database Management Systems Course

- Given specifications, created SQL database and developed a terminal based online messenger system similar to Facebook Messenger.
- Features include: Changing user login/password; Adding/Deleting from list of contacts; Adding/Blocking users from chat; Ability for users to edit/delete messages.
- Created several indexes and triggers to optimize search queries.

Simple Twitter Application - Python

Aug. 2015 - Dec. 2015

Computer Networks Course

- Created a terminal based client-server application with socket programming based on Twitter using TCP/IP.
- Using Mininet, created custom network topology for 1 server and up to 3 clients.
- Server features include: managing users subscriptions and real-time distribution of client messages to subscribers .
- Client features include: editing followers/subscriptions, view trending topics/hashtags, read offline messages, post messages to followers.

8 Puzzle Solver - C++

Aug. 2016 - Dec. 2016

Introduction to Artificial Intelligence Course

- Created terminal based 8 puzzle solver in which user can solve and trace back solution of the 8 puzzle.
- User can find unique solutions and compare solve times using the three algorithms implemented: Uniform cost, A* misplaced tile heuristic, A* Manhattan distance heuristic.

Micro-Controllers - C

Jan. 2015 - Dec. 2015

Embedded Systems Course

- Used ATmega1284 micro-controller to create a simulated security alarm system in Embedded Systems course using USART communication between micro-controllers.
- Components included: IR sensors used for motion detection, Microphone and temperature sensor, LCD screens, keypads for user interface.

Skills

Programming Languages

C/C++ (Proficient), Java (Prior experience), SQL (Prior experience), Bash scripting (Prior experience), Python (Prior experience), Perl (Prior experience), Verilog (Prior experience)

Operating Systems and Applications

Linux(Ubuntu, CentOS), UNIX, Windows, Git, Synopsys Custom Designer, Xilinx, Atmel Studio, Visual Studio