

CARLOS FLORES

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GITHUB: CARLOSFLRS

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Education

B.A. IN COMPUTER SCIENCE
AT UNIVERSITY OF CALIFORNIA, BERKELEY
GRADUATION: FALL 2016



Projects

NEURAL NETWORK OPTIMIZATION (C)

WORKED ON OPTIMIZING AN EXISTING NEURAL NETWORK BY USING CACHE BLOCKING TECHNIQUES, AND EXTENSIONS SUCH AS SSE INTRINSICS AND INTEL AVX.

GRAPH API - TRIP FINDER (JAVA)

WROTE A GRAPH API USED TO CREATE A TRIP FINDER USING VERTICES AS LOCATIONS AND EDGES AS ROADS. I WORKED WITH VARIATIONS OF DEPTH-FIRST SEARCH AND BREADTH-FIRST SEARCH IMPLEMENTATIONS AS WELL AS DIJKSTRA'S ALGORITHM AND A* (A-STAR).

FILE COMPRESSOR (JAVA)

MADE A PROGRAM THAT COMPRESSES FILES AND DIRECTORIES USING HUFFMAN ENCODING ALGORITHMS.

CPU, ASSEMBLER AND LINKER (LOGISM, MIPS, C)

WORKED ON DIFFERENT PROJECTS WITH THE GOAL TO SIMULATE A COMPUTER USING A RISC-V PROCESSOR AND BUILD EACH PART OF THE PROCESS TO INTERPRET BINARY INSTRUCTIONS.

NBA FINALS SALES VISUALIZATION (JQUERY, CARTODB PLATFORM)

DURING MY INTERNSHIP I WORKED ON CREATING A VISUALIZATION ON A MAP OF THE RECORDED SALES BY THE WARRIORS AND CAVALIERS DURING THE 2015 NBA FINAL.

Computing Skills

JAVA, PYTHON, JAVASCRIPT, HTML, CSS, C, POSTGRESQL, MIPS, SPARK

Work Experience

UNDERGRADUATE STUDENT INSTRUCTOR FOR CS10 (DECEMBER 2014 - PRESENT)

I WORK AS A TA FOR CS10 (THE BEAUTY AND JOY OF COMPUTING) AT BERKELEY. MY DUTIES INVOLVE LEADING LAB SECTIONS AS WELL AS WEEKLY DISCUSSION. CS10 IS A CLASS DESIGNED FOR NON-MAJORS TO EXPLORE COMPUTER SCIENCE. WE TEACH STUDENTS USING A PROGRAMMING LANGUAGE CALLED SNAP! (SIMILAR TO MIT'S SCRATCH). IT IS EXCITING TO BE PART OF A TEAM THAT SHAPES A CLASS CURRENTLY TAKEN BY THOUSANDS OF PEOPLE THROUGH EDX.

EMARKETING INTERN AT FANATICS INC. (JUNE 2015 - AUGUST 2015)

I INTERNEED FOR AN ECOMMERCE SPORTS RETAIL COMPANY THAT POWERS HUNDREDS OF WEBSITES. I WORKED ON DIFFERENT PROJECTS, A SALES VISUALIZATION USING CARTODB (A MAPS PLATFORM) AND GENERATING KEYWORD SUGGESTIONS THROUGH GOOGLE'S ADWORDS API AND KEYWORD QUERY REPORTS.

Classes

CS188: ARTIFICIAL INTELLIGENCE

CS170: EFFICIENT ALGORITHMS AND INTRACTABLE PROBLEMS

CS61B: DATA STRUCTURES AND ALGORITHMS

CS61C: MACHINE STRUCTURES

CS61A: STRUCTURE AND INTERPRETATION OF COMPUTER

CS70: DISCRETE MATHEMATICS AND PROBABILITY THEORY