

# Carlos Flores

carlos.flrs@berkeley.edu

(916) 719-8359

github: carlosflrs

web: carlos.codes

## Education

**B.A. in Computer Science  
at University of California, Berkeley**

graduation: Spring 2017



## Projects

### Linear Support Vector Machine for MNIST Dataset (Python)

I wrote a program that uses an svm to classify handwritten digits. The linear classifier achieved about 90% accuracy. I also added a small feature that calculates the Histogram of Oriented Gradients increasing accuracy to 97%.

### Neural Network Optimization (C)

Worked on optimizing an existing neural network by using cache blocking techniques, and extensions such as SSE Intrinsic and Intel AVX.

### NBA Finals Sales Visualization (Jquery, CartoDB)

During my internship I worked on creating visualizations on a map of the recorded sales by the warriors and cavaliers during the 2015 NBA Finals.

### File Compressor (Java)

Wrote a program that compresses files and directories using huffman-encoding algorithms.

## Computing Skills

Java, Python, Javascript, HTML, CSS, InDesign, C, PostgreSQL, MIPS, Spark

## Work

### Undergraduate Student Instructor for CS61B (January 2016 - Present)

I teach data structures at UC Berkeley. The class is taught in Java, and is concerned with tradeoffs between time and memory for structuring data, as well as engineering moderately large programs.

### Emarketing Intern at Fanatics Inc. (June 2015 - August 2015)

I interned for a sports retail company that powers the e-commerce sites of all major professional sports leagues. 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.

### Level Playing Field Institute (September 2015 - Present)

I work as a teaching assistant for LPFI. I help teach BJCx (Beauty and Joy of Computing) and AP CS to high school students. LPFI focuses on empowering under-represented minorities and giving them tools to grow and pursue their interest in computer science.

### Undergraduate Student Instructor for CS10 (December 2014 - Present)

I teach Beauty and Joy of Computing at UC Berkeley. The class focuses on "big ideas" of computing, such as abstraction, recursion, concurrency, and the limits of computing. The course is designed for non-majors and we also discuss impacts of computing in society.

## Classes

**CS188: Artificial Intelligence**

**CS189: Machine Learning**

**CS170: Algorithms and Intractable Problems**

**CS61C: Machine Structures**