Jayson Jeon

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2605 Ellsworth St. #8
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Education **B.A. Computer Science — UC Berkeley, intended graduation May 2017**

Relevant Coursework — Computer Programs, Data Structures, Machine Structures, Algorithms, Databases, Security, Artificial Intelligence, Machine Learning, Linear Algebra/Diff Eq., Discrete Maths/Probability, Random Processes, Circuits, Web Design**, Big Data with Apache Spark***

Experience **CS 61B (Data Structures) Lab Assistant, UC Berkeley – Jan 2015 - Dec 2015**
• Assisted students on lab assignments and projects under the teaching assistant
• Improved lab experiences of data structures course by creating a system to manage course staff, which helped about 500 students and more than 100 staff members.

Projects **League of Legends Player Analyzer**
• Wrote Python code to analyze a League of Legends (online game) player's statistics
• Used Riot (RESTful) API to retrieve data from Riot (game company)
• Calculates a player's statistics such as win rate, kill-death ratio, and whether or not the player is currently playing the game.
• Able to know when the API request cap has been reached and waits until cap is gone

Digit Classifier with SVM
• Created a classifier that takes in pixelated digits (0 to 9) with NumPy and SciPy
• Used support vector machine to classify and used cross-validation methods to find a value for the hyperparameter c
• Trained on thousands of samples using training/validation set and achieved an accuracy rate of 90% on test set (submitted on Kaggle)

Popularity Ranking on StackOverflow
• Implemented the PageRank algorithm with Python to find which topics on StackOverflow are the most popular (turned out to be Java and C)
• Used BeautifulSoup4 to parse through the web pages and find valid links and tags

Image Depth Perception and Performance Optimization
• Created a C program that can approximate depth within a stereo image
• Optimized the program to increase the operation rate from 1.7 Gflops to 24 Gflops
• Used loop reordering, loop unrolling, Intel SSE Intrinsics, and OpenMP techniques

Apache Spark MapReduce and Cloud Computing
• Used Apache Spark to find a solution to a game (sliding blocks on a board)
• Made flatmap, map, and reduce methods in Python that find the results to all possible moves then choose the winning moves
• Ran the code on a bigger scale on Amazon AWS EC2 servers

Skills **Languages** — Python, Java, C, MIPS, SQL, HTML5/CSS3, JavaScript (JQuery)

Parallel Computing — Apache Spark, Intel SSE Intrinsics, OpenMP

Others — Git, Unix, Logisim, Multisim, Google Docs, NumPy/SciPy

*Currently enrolled   **deCal course run by students   ***MOOC on edX offered by UC Berkeley