# Daniel Nguyen

## Personal Data

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| Address: | REDACTED | Phone: | REDACTED |
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## Education

Expected May 2017 — Bachelor of Arts in Computer Science, Linguistics, Japanese
The University of California, Berkeley
Minor: Korean
Gpa: 3.5

## Work Experience

*Current*
January 2015-Present

### CS61B Data Structures Head Undergraduate Student Instructor

Part of the staff for CS61B. Developed homework and projects for students. Led a discussion section and a lab section. Taught students core concepts behind data structures and programming methodology.

June 2014-December 2014

### Lab Assistant for CS61B/CS61BL Data Structures and Advanced Programming

Helped students debug projects and homework. Assisted students with understanding the core concepts behind data structures and good programming methodology, with an emphasis towards test driven development.

December 2014-January 2015

### Contractor for RoomForward

Worked at the RoomForward start-up. Developed back end using Rails and front end using Foundation

## Languages

English, Japanese, Korean, Vietnamese

## Computer Skills

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| Advanced Knowledge: | Java, Python, LaTeX, MATLAB, Octave, Julia,Word, PowerPoint |
| Intermediate Knowledge: | Ruby, Scheme, C, HTML, CSS, Javascript, Excel |
| Basic Knowledge: | Objective C |

## Personal Projects

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|---|---|
| In Memory Database | Created a program that accepts a limited range of commands, similar to the Redis Database. Accepts input from stdin or a file. Implemented in Java |
| Ruby on Rails Website | Created a web application with features similar to Twitter. Allowed for uses to create micro posts and follow other users. |
| Twitter Voice App | Created at the Big Hack Hackathon. Made an app that read out the current tweets related to a search input. Implemented in Java |
| Pacman AI | Created an AI for Pacman, including problems for maze solving and getting a high score through heuristics and various search algorithms. Implemented in Python |
| Sobel Edge Detector | Created a Sobel edge detector, implemented with run-length encoding that took in tiff images and created blurred versions and black and white versions of the image. Implemented in Java |
| Map-Reduce Puzzle Solver | Created an program that strongly solved an n-puzzle sliding board game. Implemented using Spark in Python |

## Interests and Activities

Teaching, Optimization, Programming, Natural Language Processing, Learning Languages, Algorithm Design