# Daniel NGUYEN

#### Personal Data

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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

CS61B Data Structures Head Undergraduate Student Instructor

January 2015-Present 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. As head TA, dealt with logistics of the

class.

June 2015-Present

Researcher with Stat News Group

Did research on optimization and machine learning applied to news media, including

twitter, newspapers, academic corpora, etc.

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

Advanced Knowledge: JAVA, PYTHON, IATEX, MATLAB, OCTAVE, JULIA, Word, PowerPoint, Excel

Intermediate Knowledge: Ruby, Scheme, C, HTML, CSS, Javascript

Basic Knowledge: Objective C

#### Personal Projects

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. Imple-

mented using Spark in Python

# Interests and Activities

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