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

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. As head TA, dealt with logistics of the class between instructor and the TAs

June 2015-Present — Researcher with Stat News Group

Did research on optimization and machine learning applied to news media, including twitter, academic corpora, etc. Currently working on applying deep learning as a preprocessing method for authorship queries.

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

Personal Projects

Neural Net — Created a multi-layer neural net implementation in Julia. Involved additional optimizations including ReLUs and dropout.

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

Text Corpora Summarizer — Created a web interface and backend to analyze a corpora of medical paper abstracts and cluster them based on topics as part of Statnews. Used PCA in order to do the clustering

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

Interests and Activities

Teaching, Machine Learning, Optimization, Natural Language Processing, Learning Languages