Scott Lee

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EDUCATION

University of California, Berkeley Expected Graduation Date: **May 2016**
B.S. Electrical Engineering and Computer Science and Statistics **GPA: 3.3**

- Regents' and Chancellors' Scholar PG&E Bright Minds Scholar

COURSEWORK

- *Structure and Interpretation of Computer Programs (Python)* *Data Structure and Algorithmic Analysis (Java)*
- *Machine Structures* *Discrete Mathematics and Probability Theory*
- *Artificial Intelligence* *Introduction to Microelectronic Circuits*
- *Efficient Algorithms and Intractable Problems* *Internet: Architecture and Protocols(Networks)*
- *Machine Learning** *Operating Systems**

SKILLS

- Python Java C JavaScript/HTML/CSS d3 Unit Testing Unix
- PHP GIT JQuery Ruby Ruby on Rails R (statistical learning) MIPS

WORK EXPERIENCE

The Aerospace Corporation (Network Systems Software Intern) 06/14 – 08/14

- **Interactive Network Visualization Tool & GUI –** Interface to a program that simulates a defense network with nodes and links. Used Traits package and subprocesses in python to create GUI. **D3/JavaScript/HTML/CSS** to create interactive force-directed graph to simulate network; used **PHP** as server for communication between GUI and graph, to allow deletion of nodes/links from graph and output in GUI.
- **Network Performance in Cloud Computing –** Used **OpenStack** and **AWS** to perform extensive testing with both UDP and TCP, as well as iPerf, LookBusy, and other tools to simulate different scenarios and draw conclusions.

UCB IST-Telecommunications Network Operations and Services 09/14 - Present

- **Network Engineer Assistant**
- Installation, setup, and support of network infrastructure for UC Berkeley campus
- Ethernet switches, troubleshooting network problems, OSI layers model, TCP/IP, and Unix

PROJECTS http://github.com/scottlandg6

Music Transcription (Python, C) (Done at Calhacks in team of 4) 10/14

- Read music from an audio file (WAV or MP3), produce frequencies using FFT (C and Python), and convert notes.
- Attempted rhythm recognition and transcribes music into PDF format using lilypond.

Trip Finder (Java) (A* Search & DFS/BFS) 11/13

- A client that takes in locations and distances and places them into graph structure.
- Uses A* search to find the shortest path between inputted locations and prints out GPS-style directions. Implements breadth first traversal and depth first traversals.

Jumping Cubes with AI (Java) 10/13 – 11/13

- Two-person board game with N x N squares. Client takes in commands (set number of spots, size of board, etc.) and can print current state of board.
- Create an AI using MinMax/Alpha-Beta Pruning that must be able to force wins.

Pong (Python & SimpleGUI) 10/13 – 11/13

- Built the classic arcade game pong using python.
- Utilizes frames, canvases, and other options of SimpleGUI to build the interface of the game.

Hadoop/MapReduce (Java) 03/14

- Connect 4 game with AI (Minmax) Done with MapReduce framework from Hadoop.
- Ran on EC2 machine to analyze effectiveness of using more machines and efficiency of combiner.

ShowCam (Ruby on Rails) (Done at LA Hacks in a team of 4) 04/14

- Project at LA Hacks with a group of 4. Uses webcam to sense motion, records video when motion is sensed and uploads to webapp.
- Mostly worked on the webapp framework, using Ruby on Rails for backend/database and HTML/CSS/JS for front.

INTERESTS/EXTRACURRICULARS

- Stocks (3 years) – Learned to make valued judgments and read market trends. (150% increase in portfolio)
- Hackers@Berkeley UCB Club/Team Badminton UCB League of Legends team Travelling/Exploring Writing