Richard Lee

408-507-8068, rlee46@illinois.edu

Education

Bachelor of Science, Computer Science
University of Illinois at Urbana-Champaign
Expected Graduation: December 2015, GPA: 3.6

Experience

KPCB Engineering Fellow, Software Engineering Intern — Summer 2015
LendingClub, San Francisco, CA

- Built a platform for management, execution, and consolidation of diagnostic scripts across the company
- Project consisted of a RESTful service backend in Java and a frontend in Node.js

SPIN Research Fellow — Fall 2014 - Spring 2015
National Center for Supercomputing Applications, Urbana, IL

- Built a data pipeline for detection of sources in astronomical images
- Explored and implemented sampling algorithms to aid in the source detection stage
- Designed and analyzed algorithms for detection of sources in sampled points

Software Engineering Intern — Summer 2014
The Climate Corporation, San Francisco, CA

- Worked on core climatology team at the intersection of research and engineering
- Took probabilistic precipitation reconstruction model from research to production
- Achieved 20x speedup in learning parameters of model
- Optimized code for memory efficiency and added parallelism to fully utilize CPUs
- Packaged and deployed model on EC2 to run reconstructions on 22 states and 60 years of data

Projects

Music Genre Classifier

- Worked on a project to classify music into three genres: Rap, Rock, and Country
- Implemented and tuned various features and algorithms to improve the performance of the system

Distributed Key Value Store

- Wrote a distributed key value store in C++ with support for CRUD operations
- System was built and tested to withstand multiple failures of nodes

Topic Modelling of Job Postings

- Pulled 17000 job listings for various cities from Indeed
- Utilized Amazon Mechanical Turk to transcribe data from job posting to uniform format
- Currently applying LDA and NMF in topic identification to try and identify what common skills sets are wanted in the job market

Skills

Languages (ordered by experience): Python, Java, Scheme, JavaScript, R, C++
Tools: git, pdb, gdb
Technologies: Linux, NumPy, SciPy, Pandas, Scikit-learn, Spring, MongoDB, jQuery

Coursework

Machine Learning, Database Systems, Algorithms, Linear Programming,
Graph Theory, Numerical Methods, Applied Regression and Design, Data Structures