

EDUCATION

Stanford University

GPA: 3.64/4.00

- **M.S. (Admitted as PhD Candidate) in Electrical Engineering (Focus: Software)**, June 2015
- *Stanford Graduate Fellowship, Texas Instruments Fellow* for outstanding graduate students in Engineering and Sciences

Mount Holyoke College

GPA: 4.00/4.00

- **B.A. in Math & Physics (double major)**, graduated magna cum laude with High Honor in Physics, May 2013
- *Sarah Williston Senior Prize Scholarship* awarded to the five highest ranking graduating seniors

EMPLOYMENT EXPERIENCE

Software Engineer

Oracle

July 2015 – Now

- System infrastructure performance team (Work Focus: DaaS, Virtualization Technologies, Analytics in Oracle Public Cloud)
- Identified and helped solve scalability bug causing missing statistics in Solaris OS analytics service
- Integrated Solaris OS analytics service into internal performance tools
- Improved Oracle database redo log performance in SuperCluster by 30% by identifying root causes of performance tradeoffs
- Designed scheduling algorithms for kernel zones on SPARC and improved its performance on benchmarks by ~2x
- Proposed and implemented Key OS and Database Performance Indicators for internal performance tools and Cloud Analytics

Lee Teng Research Intern

Fermi National Accelerator Laboratory

Summer 2012

- Optimized the performance of superconducting radio-frequency accelerating cavities by modeling microscopic parameters
- Performed numerical simulations to extract microscopic material parameters of the cavity from test results

Research Intern

Harvard University

Summer 2011

- Designed novel microfluidic sorting devices using AutoCAD for detection of biochemical reactions
- Optimized sorting efficiency by modeling droplet size, characterizing sorting threshold and improving design geometry

Teaching Assistant

Mount Holyoke College

September 2011 – May 2013

- Courses: Object Oriented Programming, Electronics, Linear Algebra
- Led review sessions and conducted weekly office hours for help in debugging programming projects and problem sets

COURSES

Data Structures	Design and Analysis of Algorithms	Computer Organization & Systems
Principles of Computer Systems	Programming Abstractions	Object Oriented Programming
Object-Oriented Systems Design	Databases Principles	Digital Image Processing
Machine Learning	Statistical Learning	Artificial Intelligence
Data Mining and Analysis	Mining Massive Datasets	Information Retrieval and Web Search
Convex Optimization	Linear Programming	Linear Dynamical Systems

LANGUAGES & TECHNOLOGIES

- **Languages:** Java, C++, C, MatLab, Python, R, SQL, Hadoop, Hive, Pig, Impala, Javascript, CSS, JSON, LaTeX
- **Skills:** Unix, Git, Vim, Eclipse, Qt Creator, Mercurial, GDB, GCC, Valgrind

PROJECTS

Quiz Website Development

Class Project, 2015

- Established a quiz website which allowed users to create quizzes and take other people's quizzes
- Designed the quiz system infrastructure in Java and utilized MySQL database to store the data
- Created the website with HTML, JSP, CSS, Javascript and embedded Java in JSP page to query the database

Airport Signs and Markings Recognition for Enhanced Runway Incursion Avoidance

Class Project, 2015

- Designed an HSV color space sign detection algorithm using Naïve Bayes and OCR recognition MatLab
- Designed an edge detection algorithm with heuristic line segment counting for runway hold-short line detection

Sentiment Analysis of Yelp's Ratings

Class Project, 2014

- Experimented with several machine learning algorithms to predict ratings based on review text alone Python

Database and the Web

Class Project, 2014

- Created, maintained and monitored a database system for auction data from eBay, and developed a simple web interface for it
SQLite, Python, JSON

HONORS AND AWARDS

Phi Beta Kappa (honor society for liberal arts and sciences) member

May 2013

Sigma Pi Sigma (Physics honor society) member

April 2012

Bennett Prize for excellence in Physics; **Mildred L. Sanderson Prize** for excellence in Mathematics

May 2010

Singapore Ministry of Education Scholarship awarded to top foreign students to study in Singapore

2005-2008