JASON SHUM

(401) · 499 · 8019 ◇ jason_shum@brown.edu
69 Brown St, Providence, RI 02912

EDUCATION

B.Sc Computer Science, Brown University Major GPA: 3.75
Expected: May 2014

- *Machine Learning* - regression, boosting algorithm, PAC learning, expectation maximization
- *Computational Probability and Statistics* - random walks, Gibbs random fields, principle component analysis
- *Algorithms* - greedy, divide and conquer, dynamic programming, linear programming
- *Programming Languages* - type systems, continuations, garbage collection, scoping
- *Software Engineering, Introduction to Computational Biology*

EXPERIENCE

Engineering Intern at Viglink June 2013 - Aug 2013
San Francisco

- Responsible for business intelligence data pipeline in Hive/Pig/Sqoop which increased lead generation by 30%
- Implemented Java backend features that processes 4000 requests per second.

Head Teaching Assistant for Introduction to Computational Biology Aug 2013 - Dec 2013

- Responsible for running of course, including course administration, design and grading of homeworks/projects and leading weekly recitations

Teaching Assistant for Probabilistic Models in Computer Science Jan 2013 - May 2013

- Led discussions with students on probabilistic analysis of algorithms and bounds for randomized algorithms

Teaching Assistant for Introduction to Computer Systems August 2012 - Dec 2012

- Led discussions sessions with students on computer systems topics

Research Assistant at Ben Raphael Computational Biology Group July 2012 - August 2012
Brown University

- Helped develop a graphical model to identify cancer pathways algorithmically

Associate at Ernst & Young - Mergers and Acquisitions Department May 2012 - June 2012

- Wrote report and created salary expenditure model of biomedical trading firm to advise client on potential acquisition
- Analyzed distributor inventory data and made recommendations to improve supply chain management

PROGRAMMING PROJECTS

Python Interpreter in Racket August 2012 - Dec 2012

- Designed a core language and implemented its interpreter in Racket
- Wrote a program to convert Python syntax into the core language for interpretation

Whisk January 2012 - May 2012

- Collaborated with three developers to solve the problem of intelligent recipe parsing
- Designed and built desktop application that generates shopping lists and finds recipes which match existing ingredients
- Worked extensively with Java, SQL, and Python web-crawler

TECHNICAL STRENGTHS/PERSONAL

Proficient	**Python**, Java, C, Pig, Hive, SQL
Familiar	Matlab, Ruby, Racket, R, Perl, PHP
Tools	LaTeX, Vim, Git
Language	Mandarin (fluent), Cantonese (fluent)
Interests	Classical music enthusiast (tuba, trombone, euphonium, cello player), soccer player