Terence Sun

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EDUCATION

Carnegie Mellon University — **Anticipated Spring 2017**
Bachelor of Science, Electrical and Computer Engineering
Pittsburgh, PA

- Current GPA: 3.66/4.0
- Double Minor: Software Engineering, Computer Science
- Relevant Course Work: Fundamentals of Software Engineering, Managing Software Development, Software Engineering Practicum, Principles of Software Construction, Intro to Computer Systems, Embedded Real-Time Systems, Structure and Design of Digital Systems

WORK EXPERIENCE

Google — **Jun 2015 — Aug 2015**
Engineering Practicum Intern - Mountain View, CA

- Pioneered work on first-party product review collection within Google Shopping
- Worked full-time with three different engineering teams to develop and prototype the review system

Carnegie Mellon University - Principles of Software Construction (15-214) — **Jan 2015 — Present**
Computer Science Teaching Assistant - Pittsburgh, PA

- Help students master software engineering concepts in 1 hour recitations and 2 hour office hours weekly
- Develop homework and recitation assignments with other TAs, and grade homeworks and exams

National Energy Research Scientific Computing Center (NERSC) — **May 2014 — Dec 2014, Jun 2013 — Aug 2013**
Computational Sciences Division Student Programmer - Oakland, CA

- Created a portal and API to interface with array-based mass spectrometry data in the parallel SciDB database
- Developed NEWT framework: a pluggable REST API that connects scientific computing resources to the web

PUBLISHED PAPERS

"Analysis of Metaboloics Datasets with High-Performance Computing and Metabolite Atlases" — **Jul 20, 2015**
National Energy Research Scientific Computing Center - Oakland, CA

- Published with Benjamin Bowen, Yushu Yao, Tony Wang, Oliver Ruebel, and Trent Northen in the Metabolites Journal

"The NEWT Platform: An Extensible Plugin Framework for Building ReSTful HPC APIs" — **Nov 21, 2014**
National Energy Research Scientific Computing Center - Oakland, CA

- Published with Shreyas Cholia (NERSC) to the 2014 Gateway Computing Environments Workshop (GCE)

SKILLS

Web Development

- Proficient in Django, HTML5, Javascript, JQuery, CSS3, Flask, MongoDB
- Experience with Node.js, PHP, MySQL, PostgreSQL, Ruby on Rails, Redis, Closure, AngularJS

Programming Languages and Environments

- Proficient in Java, C, Python, Unix
- Experience with Android, Ruby, SML, SciDB, BigTable, Google MapReduce

SELECTED PROJECT EXPERIENCE

Trusted Stored Product Reviews — **Jun 2015 — Aug 2015**
Google - Mountain View, CA

- Created an end-to-end product review system using Java, Google Map Reduce Framework, Google Closure that matches purchases in an order to products, emails a custom material design product review form, and stores the reviews in Google backend servers

Ruby on Rails — **Jan 2015 — May 2015**
Facebook Open Academy - CMU Course 15-413

- Contributed to the Rails project, guided by core developers, as part of the Facebook Open Academy course
- Prototyped a Ruby-native alternative of module autoloading for Ruby on Rails

Metatlas - Metabolite Atlas — **May 2014 — Dec 2014**
National Energy Research Scientific Computing Center - Oakland, CA

- Optimized SciDB queries to improve performance in generating 2D histograms, chromatograms, and spectra
- Developed in Django (Python), uses SciDB to store multidimensional LCMS data, MongoDB for metadata

NEWT 2.0 — **May 2014 — Aug 2014**
National Energy Research Scientific Computing Center - Oakland, CA

- Modularized API by creating a framework to allow NEWT to be adapted to work on different HPC clusters
- Updated API to support with Redis and Mongo databases, SGE and QSub job manager, and Globus Toolkit