Terence Sun

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EDUCATION

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

- Current GPA: 3.63/4.0
- Double Minor: Software Engineering, Computer Science
- Relevant Course Work: Implementation and Design of Operating Systems, Distributed Systems, Fundamentals of Software Engineering, Managing Software Development, Principles of Software Construction, Intro to Computer Systems, Embedded Real-Time Systems, Structure and Design of Digital Systems, Logic Design Simulation and Synthesis

WORK EXPERIENCE

Google   **May 2016 — Aug 2016**
Software Engineering Intern - Mountain View, CA

- Worked on creating a standalone version and improving performance for an end-to-end internal diffing framework with 50 daily active teams across Google and 700 daily runs
- Worked full-time with three different engineering teams to develop and prototype the review system

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 — Jan 2016**
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,**
Computational Sciences Division Student Programmer - Oakland, CA   **Jun 2013 — Aug 2013**

- 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

Programming Languages and Environments

- Proficient in Java, C, Python, Javascript, Unix, Django
- Experience with Android, Ruby, SML, SciDB, BigTable, Google MapReduce, C++, AngularJS, Node.js, PHP, MySQL, Ruby on Rails, Redis

SELECTED PROJECT EXPERIENCE

Ads Productivity E2E Diffing Framework   **May 2016 — Aug 2016**
Google - Mountain View, CA

- Improved performance for the framework by 70% by redesigning the backend data storage mechanism
- Helped create a standalone ("mini") version of the framework for diffing against a golden dataset developed in AngularJS, Django, C++, and Python

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

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