

Yang Tang

Tel: +1 (347) 559-TANG Email: tang@laioffer.com Website: <https://ytang.com>

WORK EXPERIENCE

Director of Education and Curriculum Development, LaiOffer Inc. **June 2019 – Present**
Provides Internet-based technology education to thousands of trainees around the world. Oversees curriculum development and the training of lecturers.

Software Engineer in Test Intern, Google Inc., Kirkland, WA **June 2013 – Aug 2013**
Worked on the testing of the Persistent Disk of the Google Compute Engine. Designed and implemented a web-based log analysis tool for distributed systems using Python and Java. Found and fixed many critical bugs.

Software Engineering Intern, Google Inc., New York, NY **June 2012 – Aug 2012**
Worked on DynamoRIO, a dynamic instrumentation tool written in C. Enabled 32-bit applications to run in native 64-bit mode, thereby using 64-bit-only extra registers as scratch space to improve performance.

EDUCATION

Ph.D., Computer Science, Columbia University, New York, NY **Aug 2011 – June 2019**
Thesis: Making data storage efficient in the era of cloud computing. Advised by Prof. Junfeng Yang. GPA 4.0/4.0.

M.Phil., Computer Sci. & Eng., The Chinese University of Hong Kong **July 2009 – July 2011**
Advised by Prof. Patrick P. C. Lee and Prof. John C. S. Lui.
Graduated with **Professor Charles K. Kao Student Creativity Award** and **Best TA Award**. GPA 3.89/4.0.

B.Eng., Computer Sci. & Tech., Tsinghua University, Beijing, China **Aug 2005 – July 2009**
Outstanding Student of Beijing. Graduated with **Excellent Graduation Award**. GPA 88.4/100 (top 15%).

Exchange Student, The Chinese University of Hong Kong **Aug 2007 – Dec 2007**
GPA 3.82/4.0.

PUBLICATIONS

Yang Tang, Gang Hu, Xinhao Yuan, Lingmei Weng, and Junfeng Yang.
“Grandet: A Unified, Economical Object Store for Web Applications.”
ACM SoCC 2016, Santa Clara, CA, October 2016. (AR: 38/151 = 25.2%)

Yang Tang and Junfeng Yang.
“Secure Deduplication of General Computations.”
USENIX ATC 2015, Santa Clara, CA, July 2015. (AR: 47/221 = 21.3%)

Gang Hu, Xinhao Yuan, Yang Tang, and Junfeng Yang.
“Efficiently, Effectively Detecting Mobile App Bugs with AppDoctor.”
EuroSys 2014, Amsterdam, the Netherlands, April 2014. (AR: 27/147 = 18.4%)

Junfeng Yang, Heming Cui, Jingyue Wu, Yang Tang, and Gang Hu.
“Making Parallel Programs Reliable with Stable Multithreading.”
Communications of the ACM (CACM), 57(3), pp. 58–69, March 2014.

Henry C. H. Chen, Yuchong Hu, Patrick P. C. Lee, and Yang Tang.
“NCCloud: A Network-Coding-Based Storage System in a Cloud-of-Clouds.”
IEEE Transactions on Computers (TC), 63(1), pp. 31–44, January 2014.

Jingyue Wu, Gang Hu, Yang Tang, and Junfeng Yang.
“Effective Dynamic Detection of Alias Analysis Errors.”
ESEC-FSE 2013, Saint Petersburg, Russia, August 2013. (AR: 51/251 = 20.3%)

Yang Tang, Patrick P. C. Lee, John C. S. Lui, and Radia Perlman.
“Secure Overlay Cloud Storage with Access Control and Assured Deletion.”
IEEE Transactions on Dependable and Secure Computing (TDSC), 9(6), pp. 903–916, November 2012.

Yang Tang, Phillip Ames, Sravan Bhamidipati, Ashish Bijlani, Roxana Geambasu, and Nikhil Sarda.

"CleanOS: Limiting Mobile Data Exposure with Idle Eviction."

OSDI 2012, Hollywood, CA, October 2012. (AR: 25/215 = 11.6%)

Jingyue Wu, **Yang Tang**, Gang Hu, Heming Cui, and Junfeng Yang.**"Sound and Precise Analysis of Parallel Programs through Schedule Specialization."**

PLDI 2012, Beijing, China, June 2012. (AR: 48/255 = 18.8%)

Yuchong Hu, Henry C. H. Chen, Patrick P. C. Lee, and **Yang Tang**.**"NCCloud: Applying Network Coding for the Storage Repair in a Cloud-of-Clouds."**

FAST 2012, San Jose, CA, February 2012. (AR: 26/137 = 19.0%)

Arthur Rahumed, Henry C. H. Chen, **Yang Tang**, Patrick P. C. Lee, and John C. S. Lui.**"A Secure Cloud Backup System with Assured Deletion and Version Control."**

CloudSec (ICPP Workshop) 2011, Taipei, September 2011.

Yang Tang, Patrick P. C. Lee, John C. S. Lui, and Radia Perlman.**"FADE: Secure Overlay Cloud Storage with File Assured Deletion."**

SecureComm 2010, Singapore, September 2010. (AR: 28/112 = 25.0%)

TEACHING EXPERIENCE**Lecturer, LaiOffer Inc.**

Jan 2017 – Present

Delivered over 500 hours of lectures to thousands of students, covering data structures and algorithms.

Teaching Assistant, Columbia University

Operating Systems I (W4118).

Fall 2016

Operating Systems I (W4118).

Summer 2015

Operating Systems I (W4118).

Fall 2013

Teaching Assistant, The Chinese University of Hong Kong

Advanced Topics in Internet Technology (CMSC5709).

Spring 2011

Distributed Systems and Networks (CENG4430).

Spring 2011

Computer and Network Security (CSCI5470).

Fall 2010

Data Communication and Computer Networks (CSCI4430).

Spring 2010

Distributed Systems and Networks (CENG4430).

Spring 2010

Introduction to Operating Systems (CSCI3150).

Fall 2009

Principles of System Software (CENG3150).

Fall 2009

OPEN-SOURCE SOFTWARE**Grandet**<https://github.com/columbia/grandet>

A unified, economical object store for web applications, deployed on AWS with C++, Python, and PHP SDKs.

AppDoctor<https://github.com/columbia/appdoctor>

A distributed, automated testing tool and framework for Android applications, written in Java and Python.

NeonGoby<https://github.com/columbia/neongoby>

A system for effectively detecting alias analysis errors, implemented in C++ on the LLVM framework.

FADE<http://ansrlab.cse.cuhk.edu.hk/software/fade>

A C++ API for Linux, providing a secure overlay cloud storage with access control and file assured deletion.

Welly<https://github.com/welly-group/welly>A Cocoa BBS browser for macOS. Won **WWDC 2009 student scholarship** and Softpedia 100% FREE Award.**DynamoRIO**<https://dynamorio.org>

A runtime code manipulation system written in C. Implemented dynamic 32-bit to 64-bit binary translation.

PROGRAMMING CONTESTS

Silver medal, ACM International Collegiate Programming Contest, Asia Regional (Chengdu).

2005

Bronze Medal, the 21st National Olympiad in Informatics, China.

2004

PERSONAL SKILLS

C, C++, Java, Python, operating systems, cloud computing, and competitive programming.