# Yuduo Wu

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## **EDUCATION**

## University of California, Davis

Davis, CA

HomePage: http://www.yuduowu.com

Master of Science, Electrical and Computer Engineering

Sept 2015

Research Area: Parallel Computing (GPGPU), Graph Analytics, Advisor: Professor John D. Owens Thesis: Performance Characterization of High-Level Programming Models for GPU Graph Analytics

## Macau University of Science and Technology

Taipa, Macau Jun 2013

Bachelor of Science, Electronic Information Technology

## EXPERIENCE

Software Engineer, IBM, Cloud Division, San Jose, CA

Sept 2015 - present

- Build robust server and client side code for IBM Bluemix platform based cloud applications
- Design and implement service REST APIs, command line, and user interface microservices
- Develop OpenStack-powered DNS, security groups, and private network peering services

# Graduate Student Researcher, University of California, Davis, CA

Dec 2013 - Sept 2015

- Implemented Borůvka's parallel minimum spanning tree algorithm on GPU with C++/CUDA
- Achieved up to 120X speedup against a popular serial implementation (Boost graph library)
- Developed and maintained an open source library (Gunrock) for large-scale graph analytics
- Characterized and analyzed GPU graph analytics' high-level parallel programming models

**Internship**, Defense Advanced Research Projects Agency (DARPA), Arlington, VA Jun - Sept 2014, 2015

- Built high-level pure C and Python interfaces for Gunrock to facilitate external developers
- Implemented graph algorithms to compute attributes and generated JSON for visualization

## **AWARDS & HONORS**

IBM Manager's Choice Award, International Business Machines Corp. (IBM)

Distinguished Paper Award, Principles and Practice of Parallel Programming (PPoPP'16)

Mar 2016

IBM Solutions Excellence Award (EA), International Business Machines Corp. (IBM)

Dec 2015

Best Paper Finalist, IEEE International Symposium on Workload Characterization (IISWC'15)

Oct 2015

Dean's Honor List Scholarship, Macau University of Science and Technology

Sept 2011, 2012, 2013

Crystal Cup Award, Top 3 in GPA, Macau University of Science and Technology Sept 2011, 2012, 2013

Nam Kwong Academic Year Scholarship, Nam Kwong (Group) Co., Ltd, Macau

Sept 2012

## **SKILLS**

Python, C/C++, CUDA, GoLang, R, LATEX, Shell/Bash scripting, JavaScript, MySQL Capable of working in Unix/Linux, Mac OS X and Windows environments

#### LEADERSHIP & SERVICE

**Vice President**, *IEEE Student Branch of Macau University of Science and Technology* Managed IEEE student members and organized academic activities.

2013