

Chang-Hong Hsu

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Education

- PhD Student/Candidate Sep 2012 – present
CSE Division, Department of EECS, University of Michigan, Ann Arbor, US
GPA: 4.0/4.0, Courses: EECS470(A+), EECS578(A+), EECS570(A), EECS492(A), EECS583(A)
- Master of Science Sep 2008 – Jun 2011
Thesis title: *BNSyn: A Quick Behavioral-level Synthesis Tool*
Department of EE, National Taiwan University, Taipei, Taiwan
GPA: 95.67/100, Ranking: 1/74
- Bachelor of Science Sep 2004 – Jun 2008
Department of EE, National Taiwan University, Taipei, Taiwan
GPA: 83.37/100

Publications

- Dynamo: Facebook's Data Center-Wide Power Management System [ISCA 2016]
Qiang Wu, Qingyuan Deng, Lakshmi Ganesh, **Chang-Hong Hsu**, Yun Jin, Sanjeev Kumar, Bin Li, Justin Meza, Yee Jiun Song
- Thermal Time Shifting: Leveraging Phase Change Materials to Reduce Cooling Costs in Warehouse-Scale Computers [ISCA 2015]
Matthew Skach, Manish Arora, **Chang-Hong Hsu**, Dean Tullsen, Jason Mars, Lingjia Tang
- Adrenaline: Pinpointing and Reining in Tail Queries with Quick Voltage Boosting [HPCA 2015]
Chang-Hong Hsu, Yunqi Zhang, Michael A. Laurenzano, Ron Dreslinski, David Meisner, Thomas Wenisch, Jason Mars, Lingjia Tang
- Verifying Curve25519 Software [CCS 2014]
Yu-Fang Chen, **Chang-Hong Hsu**, Hsin-Hung Lin, Peter Schwabe, Ming-Hsien Tsai, Bow-Yaw Wang, Bo-Yin Yang, Shang-Yi Yang
- ArchIVED: Architectural Checking via Event Digests for High-performance Validation [DATE 2014]
Chang-Hong Hsu, Debapriya Chatterjee, Ronny Morad, Raviv Gal, Valeria Bertacco
- A Robust ECO Engine by Resource-constraint-aware Technology mapping and Incremental Routing Optimization [ASP-DAC 2011]
Shao-Lun Huang, Chi-An Wu, Kai-Fu Tang, **Chang-Hong Hsu**, Chung-Yang Huang
- Formal Deadlock Checking on High-level SystemC Designs [ICCAD 2010]
Chun-Nan Chou, **Chang-Hong Hsu**, Yueh-Tong Chao, Chung-Yang Huang

Honors

- HPCA 2015 Student Travel Grant [2015]
NSF
- Travel Grant [2013 – 2014, 2014 - 2015]
University of Michigan, Ann Arbor, US
- Chia-Lun Lo Fellowship [2013 - 2014]
University of Michigan, Ann Arbor, US
- Departmental Support Fellowship [2012 - 2013]
Department of EECS, University of Michigan, Ann Arbor, US

Yearly Electronic Design Automation Bounty Springsoft Education Foundation, Hsinchu, Taiwan	[2010]
National Computer-aided Design Contest for Integrated Circuits 2 nd prize Ministry of Education Taiwan	[2010]
Honorary Member of the Society The Phi Tau Phi Scholastic Honor Society at National Taiwan University, Taipei, Taiwan	[2010]

Experience

Research Collaborator/Contractor Facebook Inc.,	Nov. 2015 – present
Graduate Student Research Assistant Department of EECS, University of Michigan, Ann Arbor, US	Sep 2013 – present
Research Intern Facebook Inc., Menlo Park, US	Jul 2015 – Sep 2015
Graduate Student Instructor of EECS583 (Advanced Compilers) F14 Department of EECS, University of Michigan, Ann Arbor, US	Sep 2014 – Dec 2014
Research Assistant Institute of Information Science, Academia Sinica, Taipei, Taiwan	Dec 2011 – Jul 2012
Teaching Assistant of Logic Synthesis and Verification S10 Department of EE, National Taiwan University, Taipei, Taiwan	Feb 2010 – Jun 2010
Teaching Assistant of Data Structure and Programming F09 Department of EE, National Taiwan University, Taipei, Taiwan	Sep 2009 – Jan 2010
Intern Cadence Design Systems, Hsinchu, Taiwan	Jul 2008 – Aug 2008

Skills

Human Languages Chinese, English, Taiwanese
Programming/Markup Languages C/C++, Python, Java, Verilog, shell scripts, PHP, GNU make, Java script, LaTeX, HTML, CSS
Tools/Simulators BigHouse, LLVM, gem5, Sniper multicore simulator, BookSim NoC simulator, MiniSAT, boolector, Cadence tool chain, Synopsys tool chain