

# ANG LI

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## EDUCATION

Princeton University, Princeton, NJ, USA

**Ph.D. Candidate in Electronic Engineering**

2018.06 – Present

Supervisor: Prof. David Wentzlaff

Princeton University, Princeton, NJ, USA

**M.A. in Electronic Engineering**

2016.09 – 2018.06

Supervisor: Prof. David Wentzlaff

Tsinghua University, Beijing, China

**B.A. in Electronic Engineering**

2011.09 – 2016.06

Minor: Economics

Georgia Institute of Technology, Atlanta, GA, USA

**Exchange Student, Department of Electrical and Computer Engineering**

2013.08 – 2013.12

## EXPERIENCE

Microsoft Research, Redmond, WA, USA

**Research Intern: Dense, Multi-FPGA Communication over UDP/IP**

2019.06 – 2019.09

Sensetime Co., Ltd., Beijing, China

**Research Intern: Real-world OCR with Gated-RNN and MD-LSTM**

2019.06 – 2019.09

Stanford University, Palo Alto, CA, USA

**Research Intern: Transactional Memory on HICAMP**

2014.06 – 2014.09

Tsinghua University, Beijing, China

**Research Assistant: High-Level Synthesis with Non-volatile Memory**

2013.04 – 2015.01

Tsinghua University, Beijing, China

**Research Assistant: Interactive Projection System Based on Structured Light**

2012.11 – 2013.07

## PUBLICATIONS AND PATENTS

**[FPGA'21]** Ang Li, and David Wentzlaff, “PRGA: An Open-Source FPGA Research and Prototyping Framework”, 29<sup>th</sup> ACM/SIGDA International Symposium on Field-Programmable Gate Arrays, Feb. 2021

**[FPL'20]** Ang Li, Ting-Jung Chang, and David Wentzlaff, “Automated Design of FPGAs Facilitated by Cycle-Free Routing”, 30<sup>th</sup> International Conference on Field-Programmable Logic and Applications, Aug./Sep. 2020

**[IEEE Micro]** Jonathan Balkind, Ting-Jung Chang, Paul J. Jackson, Georgios Tziantzioulis, Ang Li, Fei Gao, Alexey Lavrov, Grigory Chirkov, Jinzheng Tu, Mohammad Shahradd, and David Wentzlaff, “OpenPiton at 5: A Nexus for Open and Agile Hardware Design”, IEEE Micro Vol. 40, No. 1, Jul./Aug. 2020

**[ASPLOS'20]** Jonathan Balkind, Katie Lim, Michael Schaffner, Fei Gao, Grigory Chirkov, Ang Li, Alexey Lavrov, Tri M. Nguyen, Yaosheng Fu, Florian Zaruba, Kunal Gulati, Luca Benini, and David Wentzlaff, “BYOC: A “Bring Your Own Core” Framework for Heterogeneous-ISA Research”, 25<sup>th</sup> International Conference on Architectural Support for Programming Languages and Operating Systems, Mar. 2020

**[ISLPED'15]** Shuangchen Li, **Ang Li**, Yuan Zhe, Yongpan Liu, Peng Li, Guangyu Sun, Yu Wang, Huazhong Yang, and Yuan Xie, *"Leveraging emerging nonvolatile memory in high-level synthesis with loop transformations"*, International Symposium on Low Port Electronics and Design, Jul. 2015

**[ASPDAC'15]** Shuangchen Li, **Ang Li**, Yongpan Liu, Yuan Xie, and Huazhong Yang, *"Nonvolatile memory allocation and hierarchy optimization for high-level synthesis"*, 20<sup>th</sup> Asia and South Pacific Design Automation Conference (ASPDAC'15), Jan. 2015

**[Patent]** Xiang Xie, Lifei Ren, **Ang Li**, Yanjun Han, Guolin Li, Jun Hu, Zhong Lv, Wei Song, Yi Zheng, and Zihua Wang, *"A Touch Interacting System and Method Based on Adaptive Layered Structured Light"*, Chinese National Invention Patent, No. 2013103145347, Jul. 2013

#### POSTERS AND WORKSHOPS

**[FPGA'20 (Poster)]** **Ang Li**, and David Wentzlaff, *"Cycle-Free FPGA Routing Graphs"*, 28<sup>th</sup> ACM/SIGDA International Symposium on Field-Programmable Gate Arrays, Feb. 2020.

**[OSDA'19 (Workshop)]** **Ang Li**, and David Wentzlaff, *"PRGA: An Open-source Framework for Building and Using Custom FPGAs"*, 1<sup>st</sup> Workshop on Open-Source Design Automation (OSDA), Mar. 2019

**[WOSET'18 (Workshop)]** Jonathan Balkind, Alexey Lavrov, Michael McKeown, Yaosheng Fu, Tri Nguyen, Mohammad Shahradd, **Ang Li**, Katie Lim, Yanqi Zhou, Ting-Jung Chang, Paul Jackson, Adi Fuchs, Samuel Payne, Xiaohua Liang, Matthew Matl, and David Wentzlaff, *"OpenPiton: An Emerging Standard for Open-Source EDA Tool Development"*, Workshop on Open-Source EDA Technology, Nov. 2018

#### TEACHING AND MENTORING

Teaching Assistant, ECE 462/562 (also COS 462), *Design of Very Large-Scale Integrated (VLSI) Systems*, 2022 Fall

Teaching Assistant, ECE 475/575 (also COS 475), *Computer Architecture*, 2018 Fall

Mentor, Google Summer of Code, *PRGA + FASM: Open-source Bitgen for FPGAs*, 2020 Summer

#### AWARDS AND HONORS

**First Prize** Scholarship for Excellent Student (10 out of 300+) 2013.10

**Top prize** in 7<sup>th</sup> "Challenge Cup" Beijing Undergraduates' Extracurricular Technology Innovation Competition (40 out of 500+) 2013.07

**First Prize** Scholarship for Excellent Student (10 out of 300+) 2012.10