YIBO LIN

PhD student ⋄ Department of Eletrical & Computer Engineering

University of Texas at Austin, Austin, TX 78712 ⋄ University of Texas at Austin

1600 Wickersham Lane apt 3089, Austin, TX 78741, USA ⋄ Phone: +1 512-605-7126

yibolin@utexas.edu ⋄ `www.cerc.utexas.edu/~yibolin`

RESEARCH INTERESTS

Physical design automation, placement and routing

EDUCATION

University of Texas at Austin, TX, USA   *Aug. 2013 – May 2018*
Ph.D. student, Department of Electrical and Computer Engineering (GPA 3.96/4.0)
Advisor: David Z. Pan

Shanghai Jiao Tong University, Shanghai, P.R.China   *Sep. 2009 – Jun. 2013*
B.S., Department of Microelectronics (GPA 91.17/100)

EXPERIENCE

Peking University, Beijing, China   *Jul. 2019 – present*
Assistant Professor
Center for Energy-efficient Computing and Applications (CECA)
School of EECS

University of Texas at Austin, Texas, U.S.   *Jun. 2018 – Jun. 2019*
Postdoc
ECE Department

Toshiba Memory Corporation, Yokohama, Japan   *May 2017 – Aug. 2017*
Internship
Memory lithography group

IMEC, Leuven, Belgium   *Sep. 2016 – Nov. 2016*
Internship
Design technology co-optimization for emerging lithography options

Chinese University of Hong Kong, China   *Jun. 2016 – Aug. 2016*
Summer Intern
Quantum computing

Cadence Design System, TX, USA   *May 2015 – Aug. 2015*
Summer Intern
Routability driven detailed placement

Oracle Inc., TX, USA   *May 2014 – Aug. 2014*
Summer Intern
Incremental timing driven detailed placement

SELECTED PUBLICATIONS

[1] Wei Li, Yuzhe Ma, Qi Sun, Zhang Lu , **Yibo Lin**, Iris Hui-Ru Jiang, Bei Yu and David Z. Pan, "OpenMPL: An Open Source Layout Decomposer", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD), 2020. (accepted)

[2] **Yibo Lin**, Wuxi Li, Jiaqi Gu, Haoxing Ren, Brucek Khailany and David Z. Pan, "ABCDPlace: Accelerated Batch-based Concurrent Detailed Placement on Multi-threaded CPUs and GPUs", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD), Feb, 2020. (accepted)

[3] **Yibo Lin**, Bei Yu, Xiaoqing Xu, Jhih-Rong Gao, Natarajan Viswanathan, Wen-Hao Liu, Zhuo Li, Charles J Alpert and David Z. Pan, "MrDP: Multiple-row detailed placement of heterogeneous-sized cells for advanced nodes", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD), Jun, 2018.

[4] **Yibo Lin**, Bei Yu, Biying Xu and David Z. Pan, "Triple patterning aware detailed placement toward zero cross-row middle-of-line conflict", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD), Jul, 2017.

[5] Zizheng Guo, Tsung-Wei Huang and **Yibo Lin**, "GPU-Accelerated Static Timing Analysis", IEEE/ACM International Conference on Computer-Aided Design (ICCAD), Nov 2-5, 2020.

RELATED COURSES

- EE382M: VLSI I   *Prof. Michael Orshansky*
- EE382N: Computer Architecture   *Prof. Aater Suleman*
- EE382V: Optimization Issues in VLSI CAD   *Prof. David Pan*
- EE382M: VLSI II   *Prof. Jacob Abraham*
- EE380L: Engineer Programming Languages   *Prof. Craig Chase*
- EE382V: Nanometer Scale IC Design   *Prof. Michael Orshansky*
- EE382V: VLSI Physical Design Automation   *Prof. David Pan*
- EE381V: Advanced Algorithms   *Prof. Evdokia Nikolova*
- EE382V: Advanced Programming Tools   *Prof. Aziz Adnan*
- EE380N: Optimization in Engineering Systems   *Prof. Ross Baldick*
- CS383C: Numerical Analysis: Linear Algebra   *Prof. Robert van de Geijn*

SKILLS

Programming Languages
C/C++, Python, Verilog

Web Development
HTML5, JavaScript/jQuery

EDA Tools
Cadence Virtuoso, Synopsys Design Compiler, Synopsys IC Compiler

AWARDS AND HONORS

Best Paper Award	ISPD	2020
Best Paper Award Nomination	ASPDAC	2020
Best Paper Award ($\times$1) & Nomination ($\times$1)	DAC	2019
Best Paper Award Nomination	ISPD	2019
Inaugural Best Paper Award	Integration, the VLSI Journal	2018
Graduate Continuing Fellowship	University of Texas at Austin	2017
Franco Cerrina Memorial Best Student Paper Award	SPIE	2016
A. Richard Newton Young Student Fellow	DAC	2014

SERVICES

TPC members: ICCAD 2018, ICCAD 2019, ICCD 2019, ISPD 2020, DAC 2020, ICCAD 2020