WEI YE

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University of Texas at Austin ⋄ Austin, TX 78712

Ph.D. student ⋄ Department of Electrical and Computer Engineering

EDUCATION

University of Texas at Austin, TX, USA   *Aug. 2015 – Present*

Ph.D. student, Department of Electrical and Computer Engineering
Advisor: Prof. David Z. Pan
(GPA: 3.87/4.00)

Zhejiang University, Hangzhou, China   *Aug. 2011 – Jul. 2015*

B.Eng., College of Electrical Engineering
Major: Electronic and Information Engineering
(GPA: 3.96/4.00)

WORKING EXPERIENCE

Cadence Design System, Austin, TX, USA   *May 2018 – Aug. 2018*

Research Intern, Voltus Team

Hisilicon Technologies Co., Ltd, Shenzhen, China   *Jun. 2017 – Aug. 2017*

Research Intern, Quality and Reliability Team

Synopsys Inc., San Jose, CA, USA   *May 2016 – Aug. 2016*

Research Intern, Clocking Team

ECE Department, University of Texas at Austin, Austin, TX, USA   *Aug. 2015 - Present*

Teaching Assistant of Digital Logic Design, Fall 2015 and Spring 2016
Research Assistant
  - Electro-Magnetic field approximation with machine learning
  - Lithography modeling with generative models
  - Machine learning methods for lithography hotspot detection
  - Scalable power grid reduction with convex optimization
  - Signal EM detection and mitigation with machine learning
  - Detailed placement for power grid EM mitigation

PUBLICATION

Conference Papers

[C8] **Wei Ye**, Mohamed Baker Alawieh, Yibo Lin, and David Z. Pan, "LithoGAN: End-to-End Lithography Modeling with Generative Adversarial Networks", ACM/IEEE Design Automation Conference (DAC), Las Vegas, NV, Jun. 2-6, 2019

[C7] **Wei Ye**, Mohamed Baker Alawieh, Meng Li, Yibo Lin, and David Z. Pan, "Litho-GPA: Gaussian Process Assurance for Lithography Hotspot Detection", IEEE Design, Automation & Test in Europe Conference & Exhibition (DATE), Florence, Italy, Mar 25-29, 2019

[C6] **Wei Ye**, Yibo Lin, Meng Li, Qiang Liu, and David Z. Pan, "LithoROC: Lithography Hotspot Detection with Explicit ROC Optimization", IEEE/ACM Asian and South Pacific Design Automation Conference (ASPDAC), Tokyo, Jan 21-24, 2019 (Invited)

[C5] **Wei Ye**, Mohamed Baker Alawieh, Yibo Lin, and David Z. Pan, "Tackling Signal Electromigration with Learning-Based Detection and Multistage Mitigation", IEEE/ACM Asian and South Pacific Design Automation Conference (ASPDAC), Tokyo, Jan 21-24, 2019

[C4] Yibo Lin, Mohamed Baker Alawieh, **Wei Ye**, and David Z. Pan, "Machine Learning for Yield Learning and Optimization", IEEE International Testing Conference, Phoenix, AZ, USA, Oct 28-Nov 2, 2018 (Invited)

[C3] **Wei Ye**, Meng Li, Kai Zhong, Bei Yu, and David Z. Pan, "Power Grid Reduction by Sparse Convex Optimization", ACM International Symposium on Physical Design (ISPD), Monterey, CA, USA, Mar 25-28, 2018

[C2] **Wei Ye**, Yibo Lin, Xiaoqing Xu, Wuxi Li, Yiwei Fu, Yongsheng Sun, Canhui Zhan, and David Z. Pan,"Placement Mitigation Techniques for Power Grid Electromigration", IEEE International Symposium on Low Power Electronics and Design (ISLPED), Taipei, Taiwan, Jul 24-26, 2017

[C1] **Wei Ye**, Bei Yu, Yong-Chan Ban, Lars Liebmann, and David Z. Pan, "Standard Cell Layout Regularity and Pin Access Optimization Considering Middle-of-Line", ACM Great Lakes Symposium on VLSI (GLSVLSI), Pittsburgh, PA, USA, May 20-22, 2015

COURSES

Engineering Programming Languages	Prof. Craig Chase
Large Scale Optimization	Prof. Constantine Caramanis
Numerical Analysis: Linear Algebra	Prof. George Biros
Data Mining	Prof. Joydeep Ghosh
Multicore Computing	Prof. Vijay Garg
High-Speed Computer Arithmetic	Prof. Earl Swartzlander
VLSI I	Prof. Jacob Abraham
VLSI II	Prof. Mark McDermott
Optimization Issues in VLSI CAD	Prof. David Pan
VLSI Physical Design Automation	Prof. David Pan

SKILLS

Programming Languages
C/C++, Python (Tensorflow), Verilog, MATLAB

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

HONORS AND AWARDS

Cadence Women in Technology Scholarship	Cadence Design System	*2018*
UTGS Fellowship	University of Texas at Austin	*2015*
National Scholarship	Zhejiang University	*2014*
UHV Scholarship	Zhejiang University	*2014*
Samsung Scholarship	Zhejiang University	*2013*
National Scholarship	Zhejiang University	*2012*
Excellent Student Awards	Zhejiang University	*2012*