LI WEI

MPhil Student ⋄ Department of Computer Science & Engineering

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RESEARCH INTERESTS

- Exploring Properties of Graph Neural Networks
- Using Graph Neural Networks in Electronic Design Automation

EDUCATION

The Chinese University of Hong Kong, NT, Hong Kong　　　Aug. 2019 – Aug. 2021(as expected)
Master of Philosophy, Department of Computer Science and Engineering
Supervisor: Professor Bei Yu
GPA: 3.940/4.000

The Chinese University of Hong Kong, NT, Hong Kong　　　Aug. 2014 – Aug. 2018
Bachelor, Department of Computer Science and Engineering
ELITE Stream student
Cumulative/Major GPA: 3.529/3.606

EXPERIENCE

NVIDIA, HKSTP, Hong Kong　　　Nov. 2019 – Present
AI Technology center internship

The Chinese University of Hong Kong, NT, Hong Kong　　　Feb. 2019 – July. 2019
Research Assistant, Department of Computer Science & Engineering

Southern University of Science and Technology, Shenzhen, China　　　June. 2018 – Jan. 2019
Research Assistant, Department of Computer Science & Engineering

SELECTED AWARDS AND HONORS

1st Place Award in EDA elite challenge	Chinese Institute of Electronics	2020
Richard Newton Young Student Fellow	DAC	2020
Best Student Paper Award	ICTAI	2019
Distinguished Paper Award	ISSTA	2019
Full Postgraduate Studentship	CUHK	2019-
2nd Place Award in CAD Contest	ICCAD	2018
ELITE Stream Student Scholarship	Faculty of Engineering, CUHK	2018
Admission Scholarship	Soong Ching Ling Foundation	2015-2018
Dean's List	Faculty of Engineering, CUHK	2015,2017,2018
Best Undergraduate Summer Project Award	Faculty of Engineering, CUHK	2017

PUBLICATIONS

Preprint

[C1] **Wei Li**, Ruxuan Li, Yuzhe Ma, Siu On Chan, Bei Yu, "Rethinking Graph Neural Networks for Graph Coloring", submitted to IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) 2021, under review.

Journal Papers

[J1] **Wei Li**, Yuzhe Ma, Qi Sun, Zhang Lu, Yibo Lin, Iris Hui-Ru Jiang, Bei Yu, David Z. Pan, "OpenMPL: An Open Source Layout Decomposer", IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD).

Conference Papers

[C8] **Wei Li**, Yuxiao Qu, Gengjie Chen, Yuzhe Ma, Bei Yu, "TreeNet: Deep Point Cloud Embedding for Routing Tree Construction", IEEE/ACM Asian and South Pacific Design Automation Conference (**ASPDAC**), Tokyo, Jan. 18–21, 2021.

[C7] **Wei Li**, Jialu Xia, Yuzhe Ma, Jialu Li, Yibo Lin, Bei Yu, "Adaptive Layout Decomposition with Graph Embedding Neural Networks", ACM/IEEE Design Automation Conference (**DAC**), San Francisco, July 19-23, 2020.

[C6] Husheng Zhou, **Wei Li**, Yuankun Zhu, Yuqun Zhang, Bei Yu, Lingming Zhang, Cong Liu, "DeepBillboard: Systematic Physical-World Testing of Autonomous Driving Systems", ACM/IEEE International Conference on Software Engineering (**ICSE**), Seoul, May 23–29, 2020.

[C5] Yuzhe Ma, Zhuolun He, **Wei Li**, Tinghuan Chen, Lu Zhang, Bei Yu, "Understanding Graphs in EDA: From Shallow to Deep Learning", ACM International Symposium on Physical Design (**ISPD**), Taipei, Mar. 25–Apr. 01, 2020. (Invited Paper)

[C4] Yuzhe Ma, Ran Chen, **Wei Li**, Fanhua Shang, Wenjian Yu, Minsik Cho, Bei Yu, "A Unified Approximation Framework for Deep Neural Networks", The IEEE International Conference on Tools with Artificial Intelligence (**ICTAI**) 2019. **(Best Student Paper Award)**

[C3] **Wei Li**, Yuzhe Ma, Qi Sun, Yibo Lin, Iris Hui-Ru Jiang, Bei Yu, David Z. Pan, "OpenMPL: An Open Source Layout Decomposer", IEEE International Conference on ASIC (**ASICON**), Chongqing, China, Oct. 29–Nov. 1, 2019. (Invited Paper)

[C2] Xia Li, **Wei Li**, Yuqun Zhang, Yuqun Zhang, Lingming Zhang, "DeepFL: Integrating Multiple Fault Diagnosis Dimensions for Deep Fault Localization",The ACM SIGSOFT International Symposium on Software Testing and Analysis (**ISSTA**), 2019. **(Distinguished Paper Award)**

[C1] Bentian Jiang, Xiaopeng Zhang, Ran Chen, Gengjie Chen, Peishan Tu, **Wei Li**, Evangeline F. Y. Young, Bei Yu, "FIT: Fill Insertion Considering Timing", ACM/IEEE Design Automation Conference (**DAC**), Las Vegas, NV, June 2-6, 2019.

TECHNICAL SKILLS

Languages	Mandarin, Cantonese, English
Programming Languages	C/C++, Python, CUDA, LaTeX