

Wenhao LIN

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EDUCATION

Harbin Institute of Technology, China

Sep 2019 – Jun 2023

- B.Eng. in Computer Science and Technology, Shenzhen Campus, thesis Advisor: **Assistant Prof. Junjie Chen**
- GPA: 3.84/4 91/100

The Chinese University of Hong Kong, Hong Kong, China

Aug 2023 - Present

- Ph.D. Student in Computer Science and Engineering, supervised by **Prof. Evangeline Young**
- Focus on electronic design automation (EDA)

RESEARCH EXPERIENCE

Parallel FPGA Routing

Nov 2023 – Mar 2024

Dept. Computer Science and Engineering, The Chinese University of Hong Kong

- **Output:** Accepted by GLSVLSI'24. Coming soon.
- Propose a novel recursive partitioning ternary tree to augment the parallelism of multi-net routing.
- Propose a hybrid updating strategy for congestion coefficients within the routing cost function to accelerate congestion resolution in negotiation-based routing algorithms
- Achieve a 2x speedup compared to the academic serial router RWRRoute

Natural Language Processing Network for Enhancer Identification

Nov 2021 – Feb 2023

Intelligent Computing Research Center, Harbin Institute of Technology

Undergraduate Research Assistant, Advisor: **Assistant Prof. Junjie Chen**

- **Output:** Li J, Wu Z, Lin W, et al. *iEnhancer-ELM: improve enhancer identification by extracting position-related multiscale contextual information based on enhancer language models*[J]. *Bioinformatics Advances*, 2023, 3(1): vbad043.
- Proposed an ensemble model for judging whether a gene sequence is an enhancer using natural language processing method.
- Outperformed state-of-the-art methods on enhancer identification task.
- Analyzed the attention structure captures the contextual information of k-mer tokens to demonstrate the interpretability of the model.

HONORS & AWARDS

3rd place in ICCAD 2023 CAD Contest on “3D Placement with Macros” Problem

2023

2nd place in Runtime-First FPGA Interchange Routing Contest @ FPGA'24

2024

SKILLS

Tools: C/C++, Java, Python, Pytorch

Language: Mandarin (Native speaker), Cantonese (Native speaker), English