

DEPARTMENT OF COMPUTER SCIENCE

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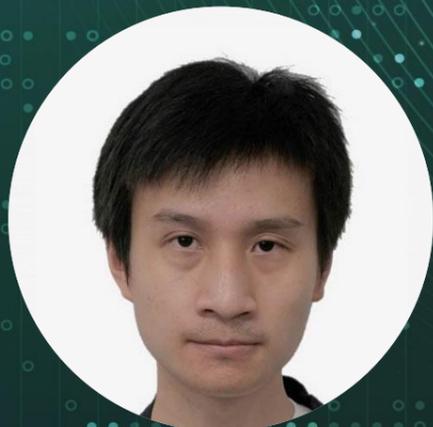
Towards Efficient and Quality VLSI Routing

DATE & TIME

20 MAR 2024 (WED) 2:00 – 3:00 PM

VENUE

Dr. Wu Yee Sun Lecture Theatre, WLB109, Shaw Campus



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ABSTRACT

Electronic Design Automation (EDA) aims at automating the design process of Very Large Scale Integrated circuits (VLSI) from register-transfer level description to physical layout. Routing is a very important and challenging problem in EDA that studies the algorithms to interconnect a huge number of electronic components using wires on the nanometre scale. In this talk, we will focus on our recent research related to VLSI routing. We will introduce our award-winning global router and discuss our routing algorithms and techniques that can explore an enormous design space super efficiently and also produce high-quality routing solutions. Finally, we will introduce a reinforcement learning algorithm that can learn to solve a fundamental problem in EDA as well as computer science, the Rectilinear Steiner Minimum Tree (RSMT) problem, better and faster than traditional heuristics.



**SPEAKER'S
BIOGRAPHY**



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