## **DAC YF**

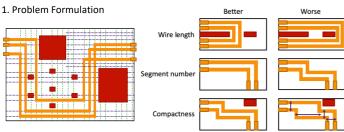
## Two Pieces of Routing-related Works



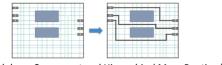


Jingsong Chen, supervised by Prof. Evangeline F.Y. Young, CUHK

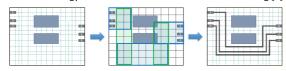
## Obstacle-Aware Topology-Matching On-Track Bus Routing



2. Counterexample: Routing One by One  $\Rightarrow$  Weak Topology Consistency

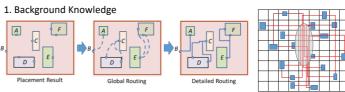


3. Our Methodology: Concurrent and Hierarchical Maze Routing [1]



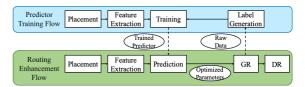
[1] "MARCH: MAze Routing Under a Concurrent and Hierarchical Scheme for Buses", Jingsong Chen et al., DAC 2019.

## Global Routing Enhancement with Deep Learning [2]



Global routing congestion

2. Routing Enhancement by Congestion Prediction using Placement Results



3. Prediction Model



[2] "PROS: a Plug-in for Routability Optimization applied in the State-of-the-art Commercial EDA Tool Using Deep Learning", Jingsong Chen et al., accepted by ICCAD 2020.