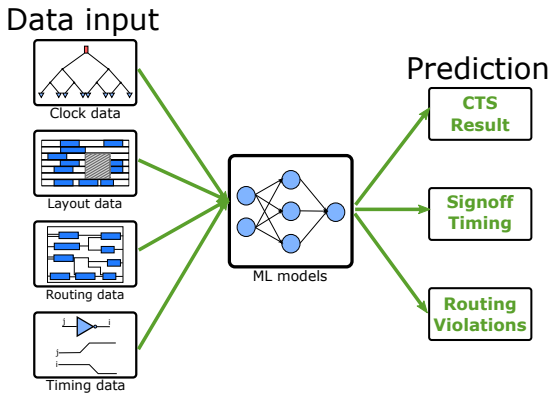
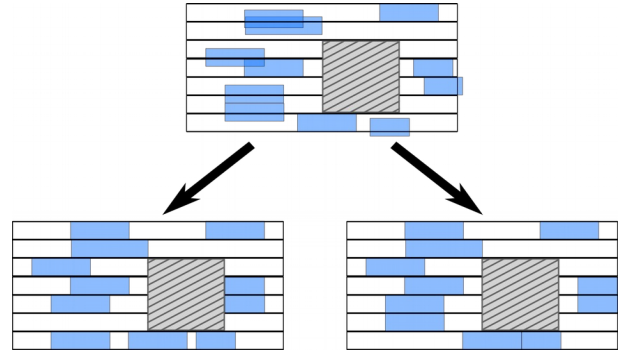


## Introduction



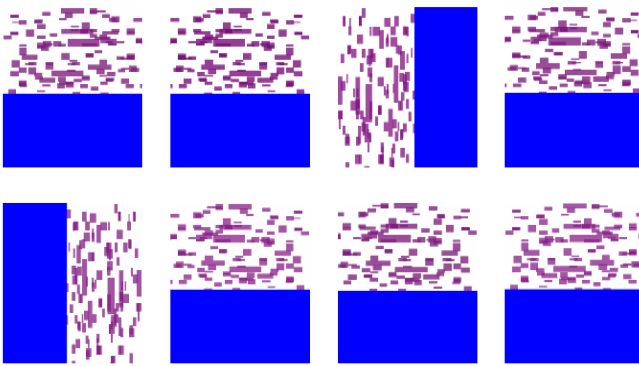
Lack of works using ML in legalization

## Target application



We use ML to select the best legalizer for a placement

## Data generation

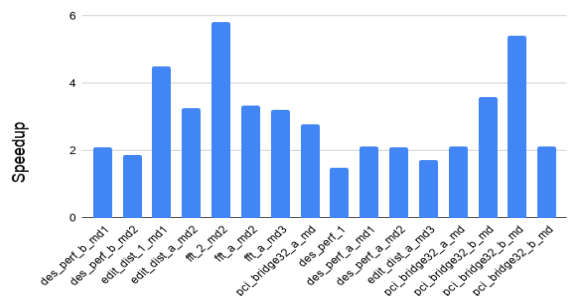
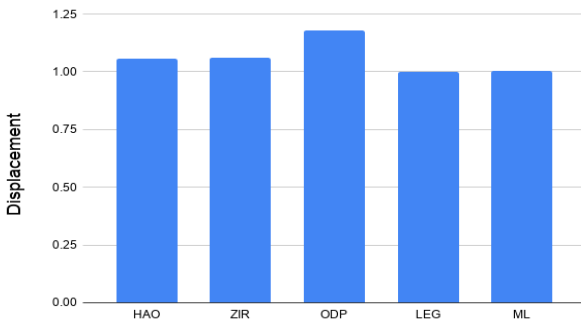


We use circuit snapshots to train CNN

## Confusion matrix

|      |     | Predicted |      |     |
|------|-----|-----------|------|-----|
|      |     | HAO       | ZIR  | ODP |
| Real | HAO | 1019      | 45   | 0   |
|      | ZIR | 0         | 1322 | 0   |
|      | ODP | 7         | 20   | 787 |

## Experimental results



ML reduced displacement with almost 6x speedup