

AI编译器-系列之前端优化

Summary



ZOMI



BUILDING A BETTER CONNECTED WORLD

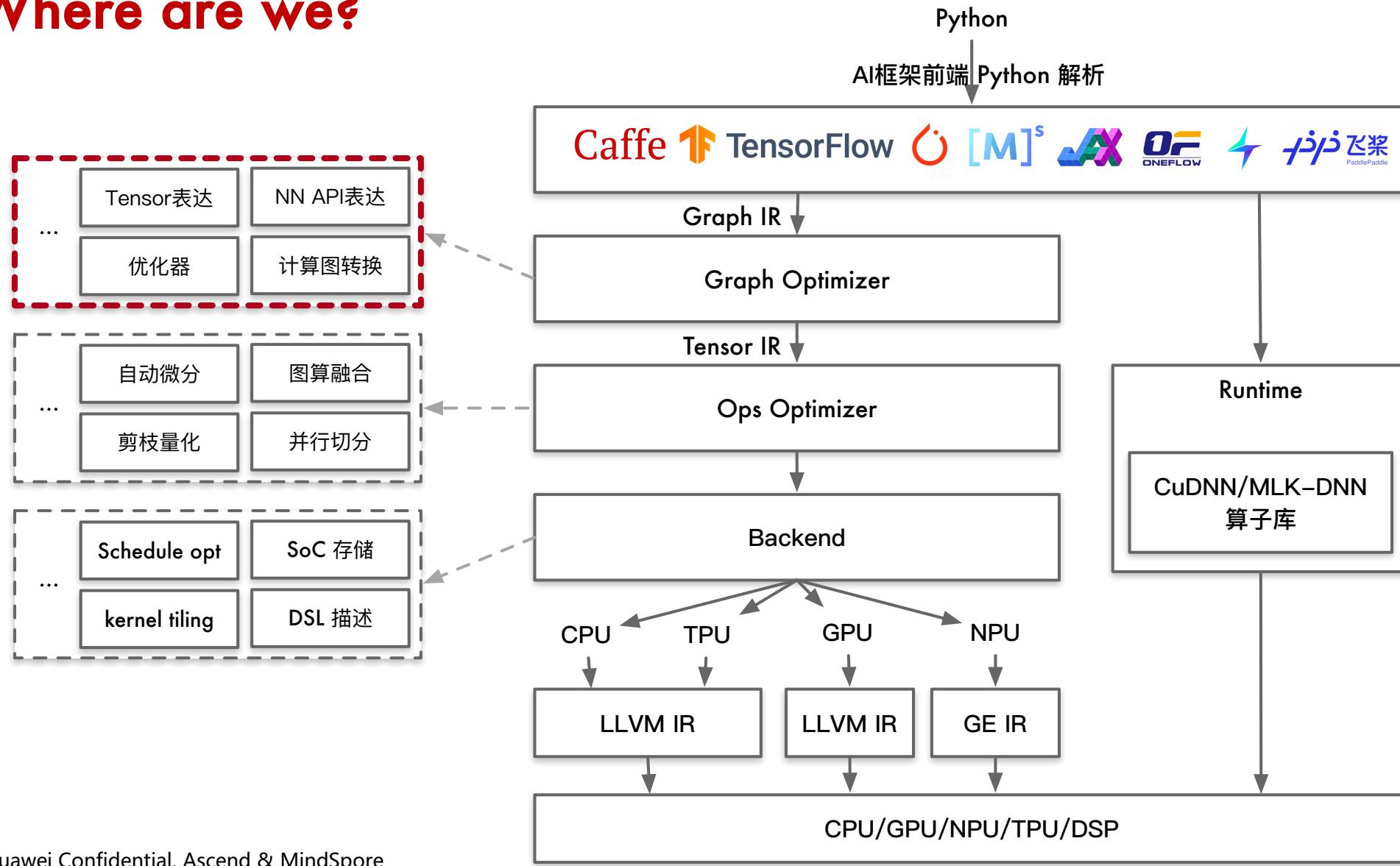
Ascend & MindSpore

www.hiascend.com
www.mindspore.cn

Where are we?

- 图层优化/前端优化/计算图优化

Where are we?



Talk Overview of Frontend Optimizer

I. AI 编译器前端优化

- 图层 - Graph IR
- 算子融合 - OP Fusion
- 布局转换 - Layout Transform
- 内存分配 - Memory Allocation
- 常量折叠 – Constant Fold
- 公共子表达式消除 - CSE
- 死代码消除 - DCE
- 代数简化 – Algebraic Reduced

Talk Overview of Frontend Optimizer

I. AI 编译器前端优化

- 图层 - Graph IR
- 算子融合 - OP Fusion
- 布局转换 - Layout Transform
- 内存分配 - Memory Allocation
- 常量折叠 – Constant Fold
- 公共子表达式消除 - CSE
- 死代码消除 - DCE
- 代数简化 – Simplify Algebraic

神经网络相关的优化

Talk Overview of Frontend Optimizer

I. AI 编译器前端优化

- 图层 - Graph IR
- 算子融合 - OP Fusion
- 算子替换 - OP Replace
- 布局转换 - Layout Transform
- 内存分配 - Memory Allocation
- 常量折叠 – Constant Fold
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代码/计算层面的优化



BUILDING A BETTER CONNECTED WORLD

THANK YOU

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