

FlashTensor

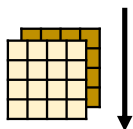
Tensor Property Identifier (§4)

Reduce Dependency: ...

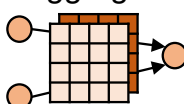
Broadcast: ...

Size: ...

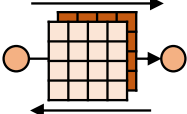
Value: ...



Aggregate

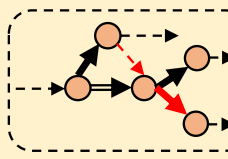


Forward



Backward

Tensor Program
with Tensor Property

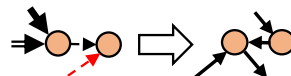


Different
Tensor Property

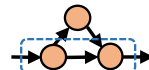


Tensor Property-Aware Optimization (§5)

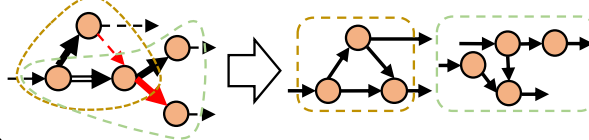
Algebraic Equivalent
Graph Transformation



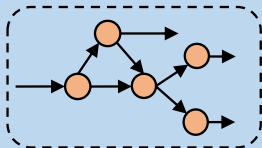
Non-Convex
Kernel Mapping



Lightweight Plan Searching



Input
Tensor Program



Optimized
Tensor Program

