load load load load load load inputs weights inputs weights inputs weights No dependences: Legend tasks execute as matrix matrix matrix context 0 soon as modules are multiplication multiplication multiplication ready, leading to context 1 erroneous execution store store store outputs outputs outputs in this scenario, the input load overwrites the data from the previous load that is still being consumed by the load load load load loa load matrix multiplication, leading to incorrect execution Insert read-after-write inpus inputs inputs weights. weights weights dependences and producer-consumer matrix matrix matrix order is respected, multiplication multiplication multiplication but tasks can execute too early store store store outputs outputs outputs load load load load load load Insert write-after-read inputs inputs weights weights weights inputs provide timely execution of tasks. matrix matrix matrix thus ensuring multiplication multiplication multiplication execution correctness store store store outputs outputs outputs