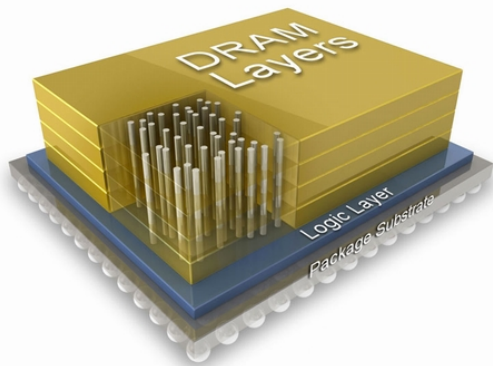


GraphPIM: Enabling Instruction-Level PIM Offloading in Graph Computing Frameworks

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(Georgia Tech, *Intel Labs)



GraphPIM

What is the main **benefit** of PIM offloading for **graph**?

How to enable PIM for graph in a **practical** way?



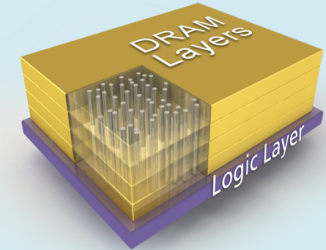
Benefits of PIM Offloading

Known PIM benefits:

Bandwidth Saving

Extra Computation

Latency Saving



GraphPIM explores:

Atomic Overhead



Data Ordering

Cache Operation

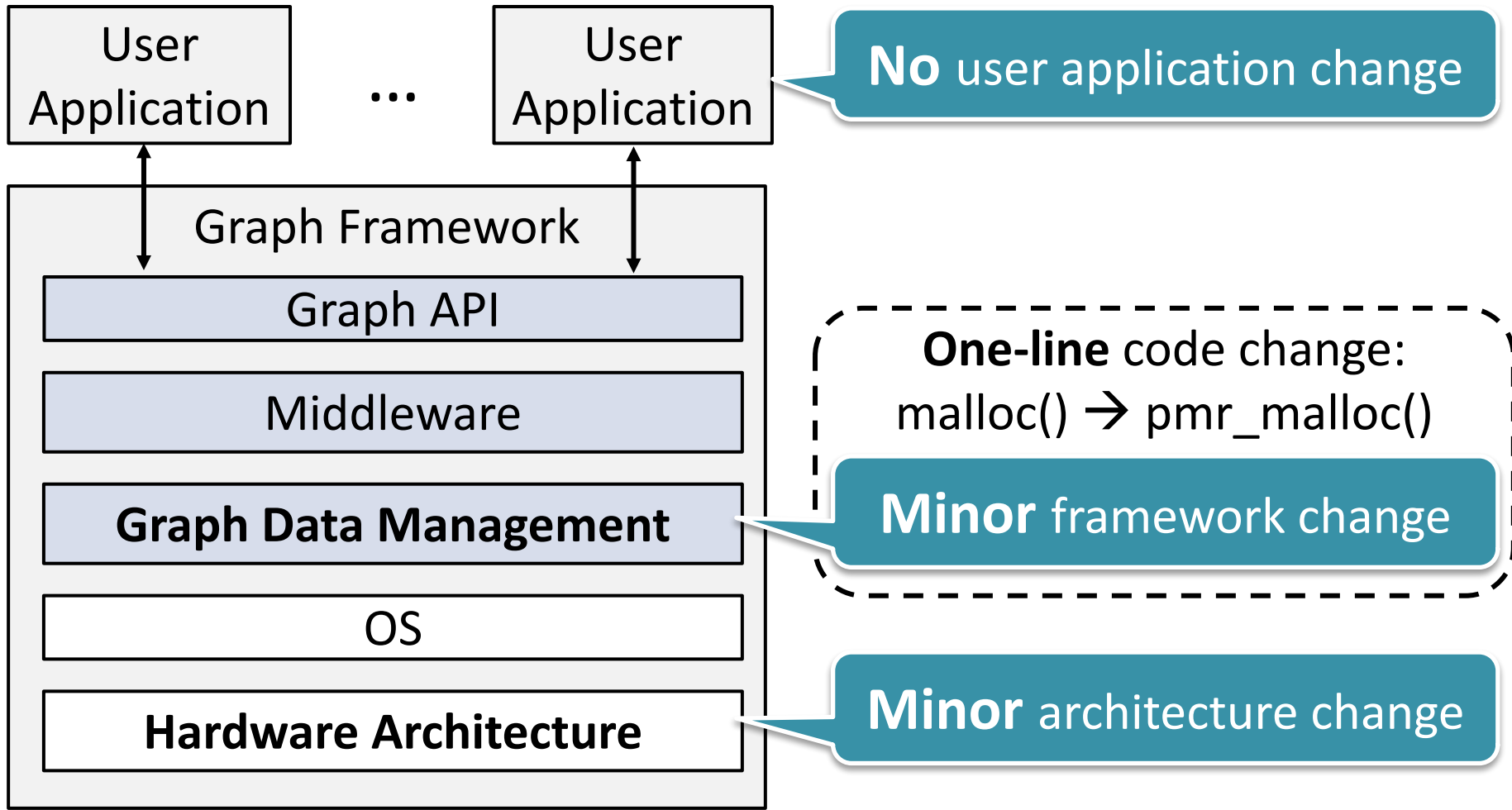
RMW

Atomic Instruction

Avoided by PIM offloading



GraphPIM: PIM-enabled Graph Framework



Talk at Tuesday 2:50pm (Session 7A)