

Kvalitet i testiranje softvera

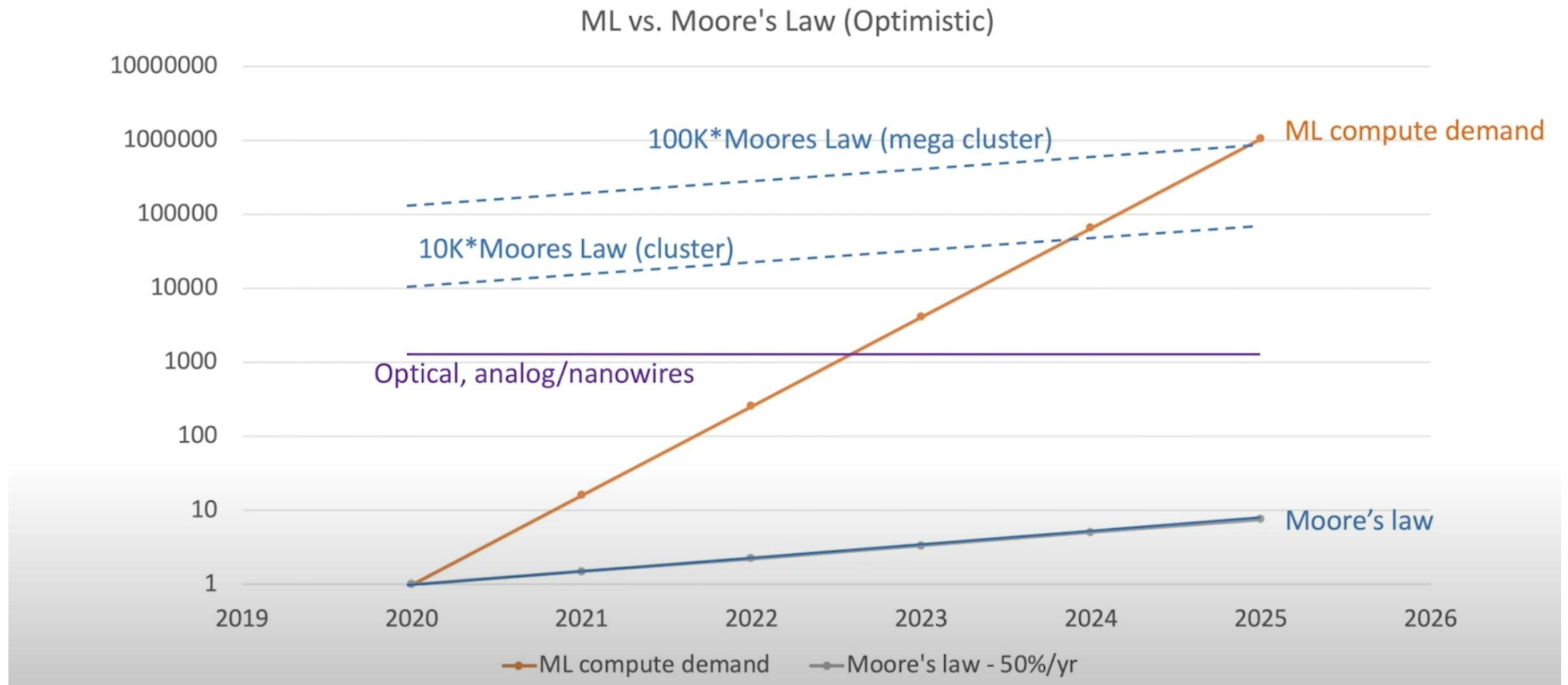
Branko Arsić,
Novembar 2022.

Machine Learning



Tenstorrent

Machine Learning vs Moore's Law



Machine Learning



TensorFlow builds next-generation computers.

Grayskull™ is the first of a new generation of AI computers.

Built to run AI, math engine for matrix multiply, convolution and tensor manipulation. Organized as an array of networked 4 TeraOp engines. Built to run Graphs, compute and data layout is handled by the compiler, data movement handled by the hardware. Clean abstraction layers top to bottom.



Machine Learning

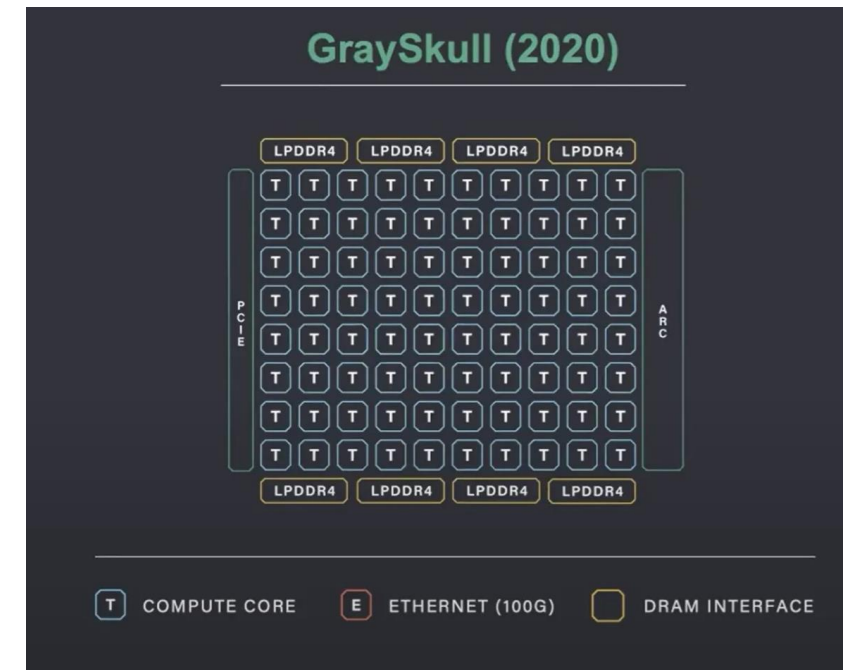


What is a 'Tensix' core?

Tenstorrent's processor cores are known as Tensix cores. Each Tensix core includes 5 RISC processors, an array math unit for tensor operations, a SIMD unit for vector operations, hardware for accelerating network packet operations and compression/decompression, and 1-2 megabytes of SRAM.

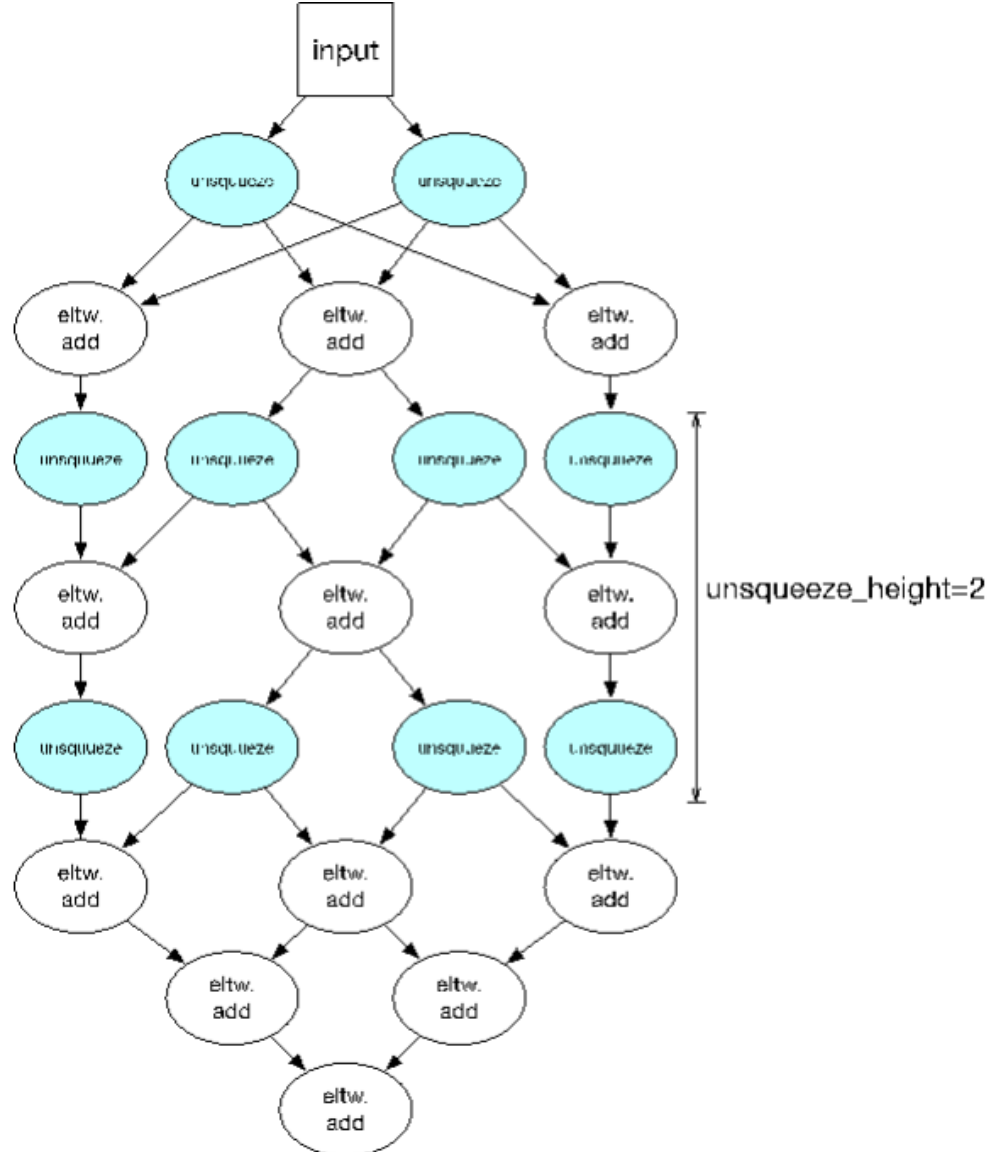
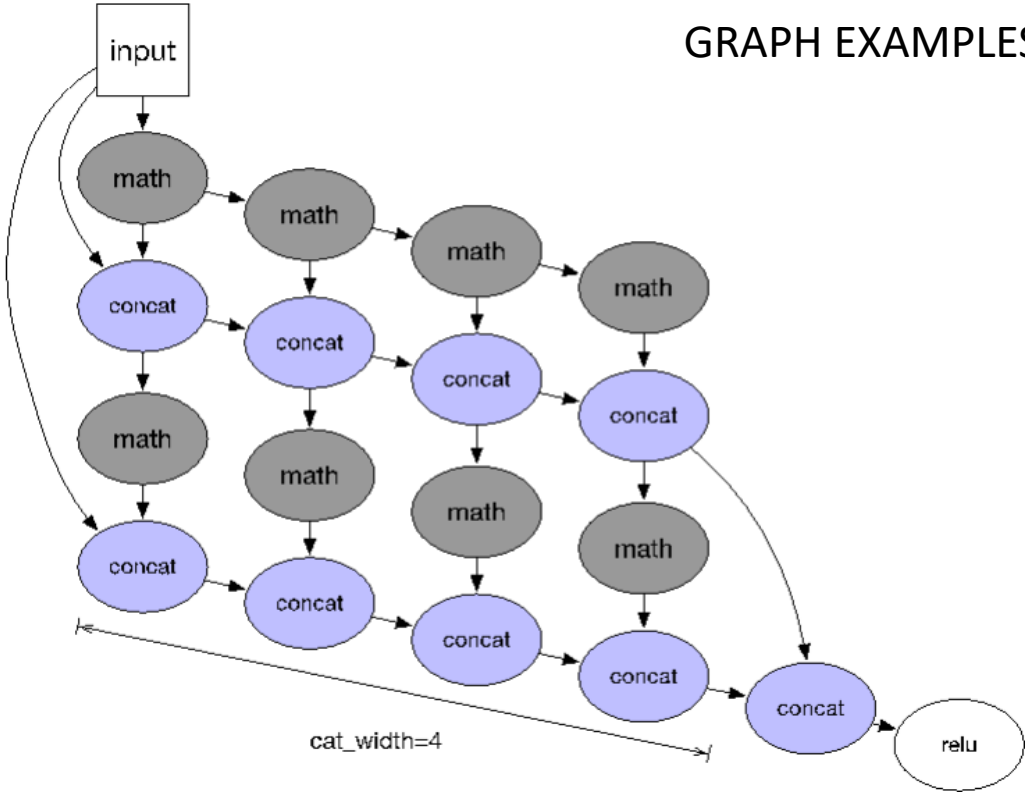
What is Tenstorrent doing differently than GPUs?

- Tenstorrent processors comprise a grid of cores known as Tensix cores.
- These processors are capable of executing small and large tensor computations efficiently.
- Network communication hardware is present in each processor, and they talk with one another directly over networks, instead of through DRAM.





GRAPH EXAMPLES:



Machine Learning



Tenstorrent

GRAPH EXAMPLES:

