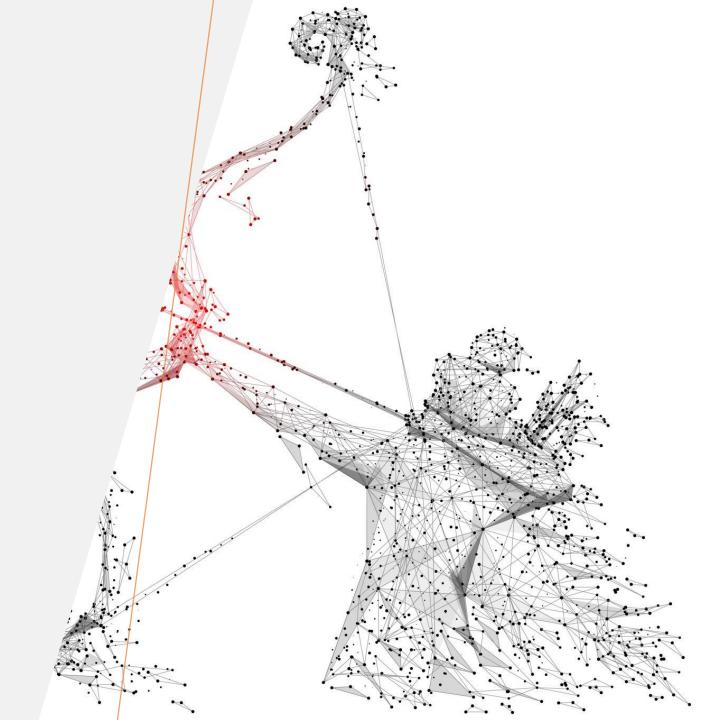
## HERMES

DNN INFERENCE PROPAGATION UNDER THERMAL CONSTRAINTS VIOLATION





## *EDGE*

- Jetson AGX Xavier
  - CPU: 8-core NVIDIA Carmel Armv8.2 64-bit
    - 8MB L2
    - 4MB L3
  - GPU: NVIDIA Volta<sup>™</sup> architecture
    - 512 NVIDIA CUDA® cores
    - 64 Tensor cores
    - 22 TOPS (INT8)
  - Deep Learning Accelerators: 2x NVDLA
    - 10 TOPS (INT8)
  - RAM: 64 GB 256-bit LPDDR4x

## CLOUD

- Alienware Aurora R9, a high-end gaming desktop computer
  - CPU: Intel<sup>®</sup> Core<sup>™</sup> i7-9700 Processor:
    - 8 cores @ 4.70 GHz
  - GPU: x2 NVIDIA GeForce RTX 2070 SUPER
    - 2560 NVIDIA CUDA® Cores
    - Boost Clock @ 1.77 GHz
    - 8 GB GDDR6 Memory
  - RAM: 64 GB DDR4



## **Hermes: Sequence Diagram** View Controller Model Send Start Input Image Inference Send Continue If temperature violation Inference Send Send Complete Output Match Label Prediction Label

HERMES