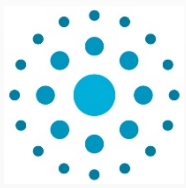


HELP

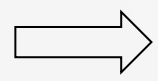
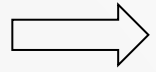
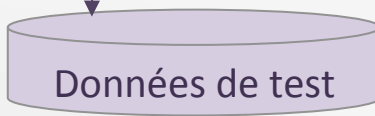
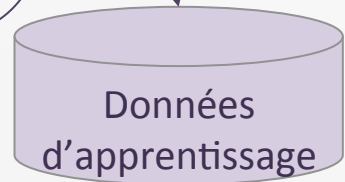
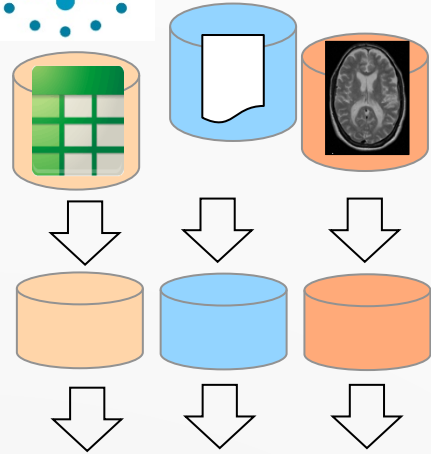
Hardworking Energy-Efficient Low Power Platform

BCL, CHUN, I3S, Inria CRISAM, MSI

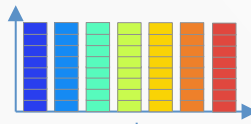
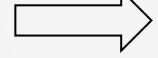




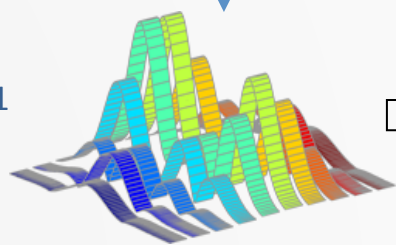
IADB: Integrating and Analyzing Medical Images



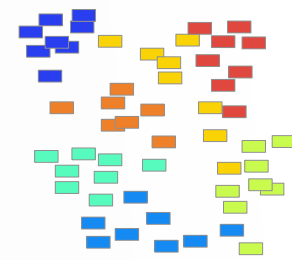
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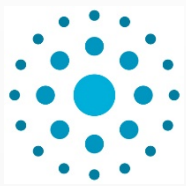


Heavyweight deep learning

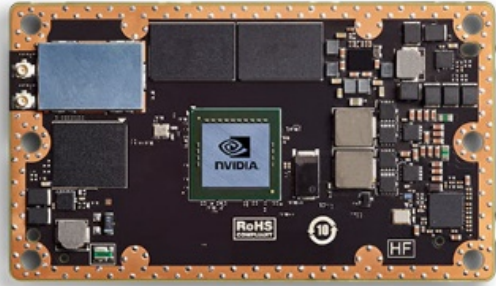


10110100101

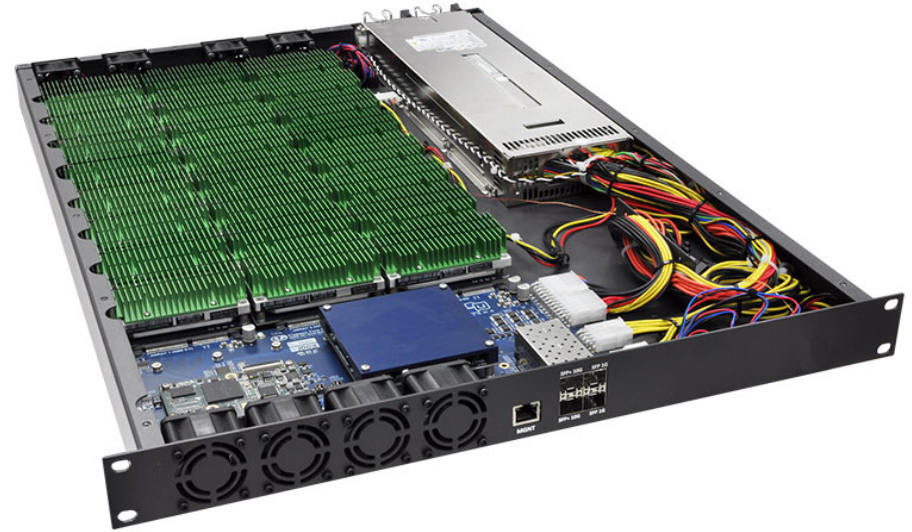




Dedicated computing platform



x 24
→

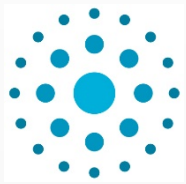


NVidia Jetson TX2

- NVidia Pascal GPU, 256 cores
CUDA capability 6.2
~ 1 TFLOPS (peak)
- ARM A57 64-bits quad-core CPU
- 8 GB memory
- 32 GB storage
- Gigabit Ethernet and Wifi

Jetson TX2 Array

- 6,144 cores (~ 24 TFLOPS, peak)
- 4 x 64-bits ARM A57 CPU
- Internal 24x Gigabit Ethernet switch
- 2 x 10 Gb + 2 x 1 Gb Ethernet links
- 3 TB SSD storage
- Redundant power supply (2 x 650 W)



Expected impact

- Compute on sensitive data inside the accredited medical data repository
 - CHU Nice
 - Medical Data Center
- Parallelize neural network optimization / execution algorithms
- Reduce learning algorithms energy footprint