#### All Things Open

# Open-Source powered and Developer-First Al Stack







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#### 14 YEARS BUILDING CLOUD INFRASTRUCTURE



Greg Wallace Partnerships at NetActuate in/gtewallace

15 YEARS IN OPEN SOURCE





### Agenda

```
• llama.py
             • Dockefile
   from tt.llama import TtTransformer
   from tt.llama import LlamaEmbedding
   from tt.llama import Tokenizer
   from tt.llama import TtModelArgs
   def preprocess_inputs_prefill(
       input_prompts,
       tokenizer,
       model_args,
       instruct
              DEPLOY
                              924,
     if max_prefill_len = 128 * 1024:
       max_prefill_len = 128 * 1024 -ma
```

**Industry context** The role of open source Demo **Evolving infrastructure** Q&A



# \$1.0T by 2029 in global data center capex as Al accelerators drive spend Dell'Oro Group





# MIT report: 95% of generative AI pilots at companies are failing





# Most organizations miss Al cost forecasts, with nearly a quarter busting their budgets by more than 50% (CIO)





# There's room for improvement

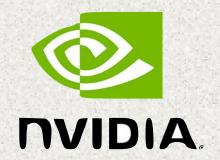




### What is Al Infrastructure?

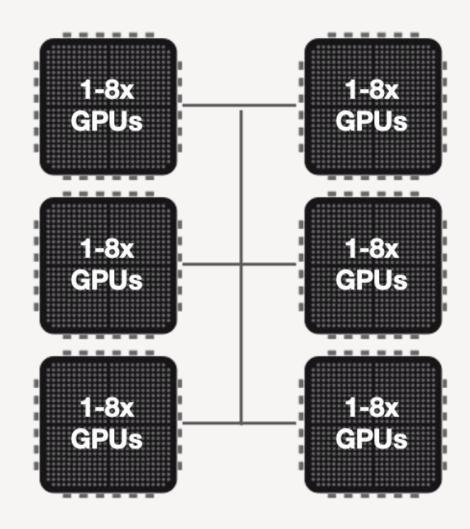






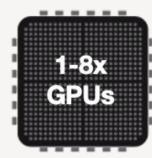


#### Large **Training**



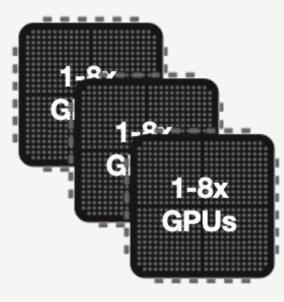
Up to 100K GPUs clusters with high-speed interconnect

#### Fine-Tuning & **Small Training**



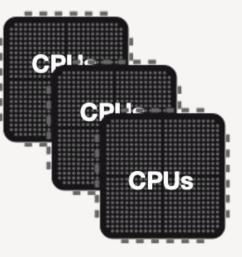
1x to 8x GPUs or Small Clusters

#### Inference



Fits one machine, needs more machines to handle parallel requests

#### Agents



High-volume, lightweight sandboxed code execution







# Maybe we need more choice?





### New Al Accelerators are Emerging

AMDI













#### Building for the Agentic Era

# Introducing Open Accelerators to Market





## We build a Global Serverless Platform

for Agents and Inference









## We Run Models and Agents

**Model & Agents continuous** deployment with Containers

Zero infrastructure management

Low latency with global deployments

**High-performance** hardware

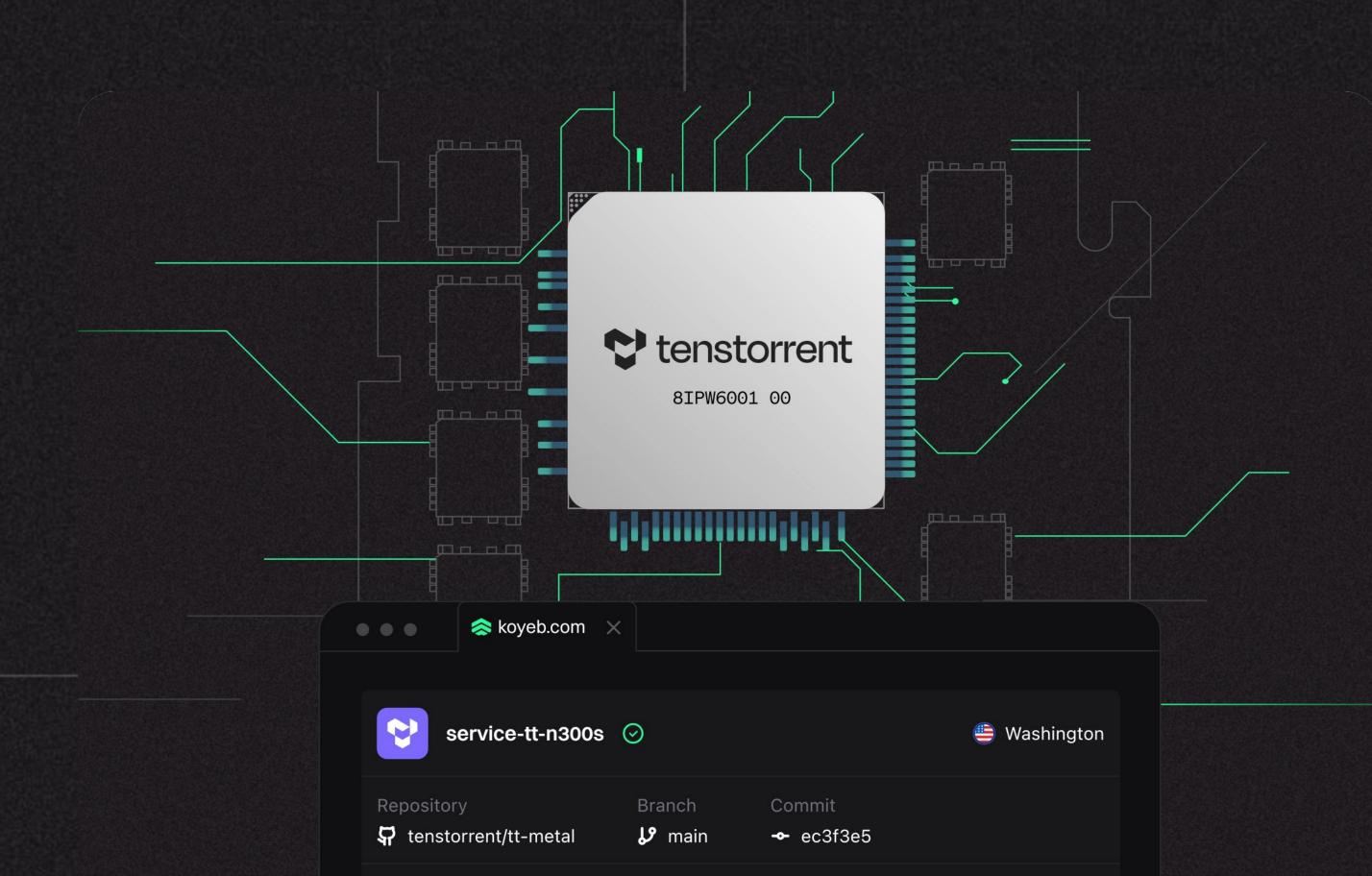
Sustainable costs with Serverless capabilities

Native resiliency and scalability





# Available in Private Preview only on Koyeb

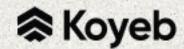




# Deploy LLAMA 3.2 11B Vision On Tenstorrent



github.com/koyeb/tenstorrent-examples



# Unified and global experience across CPUS, GPUS, and Accelerators









#### CONTAINERS IN VMS ON BARE METAL

Orchestration
Inference Engine

Container & Packaging

Koyeb

Koyeb

Virtualization

Net Actuate

Networking cilium envoy

BareMetal & Accelerator



tenstorrent

katacontainers KVM

# Software is key to Performance and Efficiency



### New Accelerators Need New Al Stacks

**Proprietary** 



Open source on closed hardware



Open source on open hardware

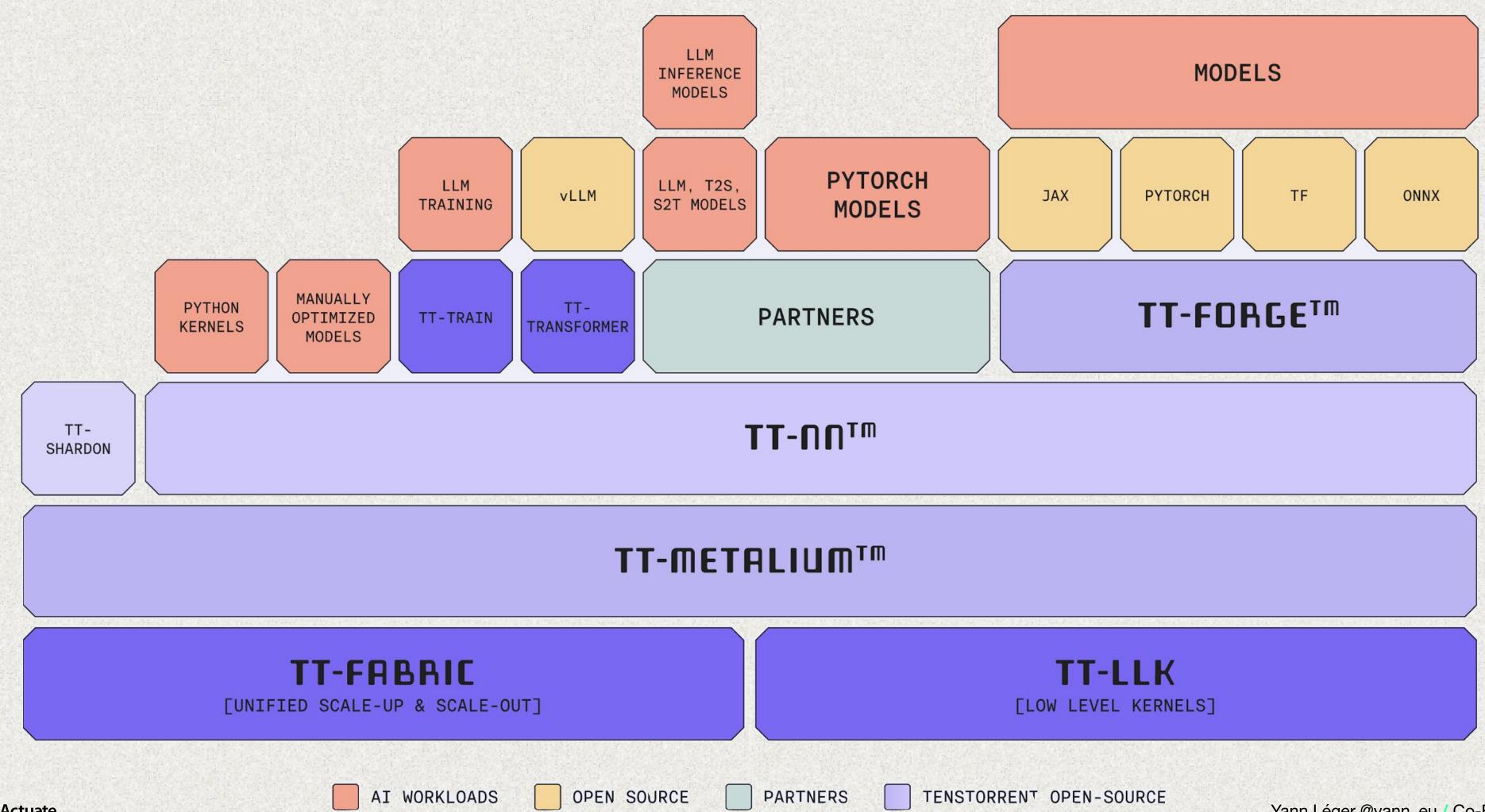


**Open standard** 





### Tenstorrent provides a fully open stack







### How can we build?



Instantly access development environments with Tenstorrent open-source SDKs, including TT-Metalium on n300s or TT-Loudbox

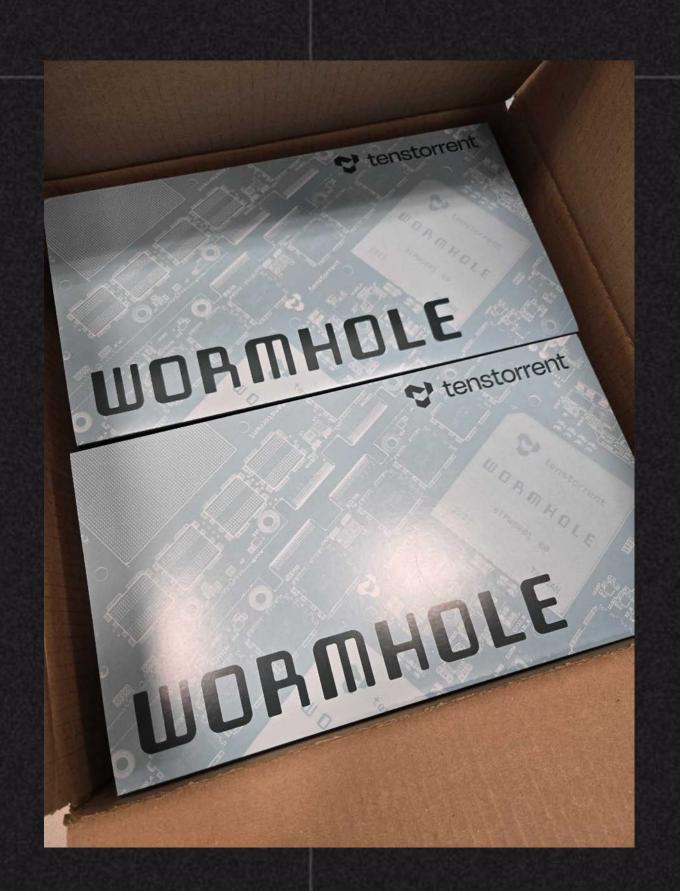
github.com/koyeb/tenstorrent-examples

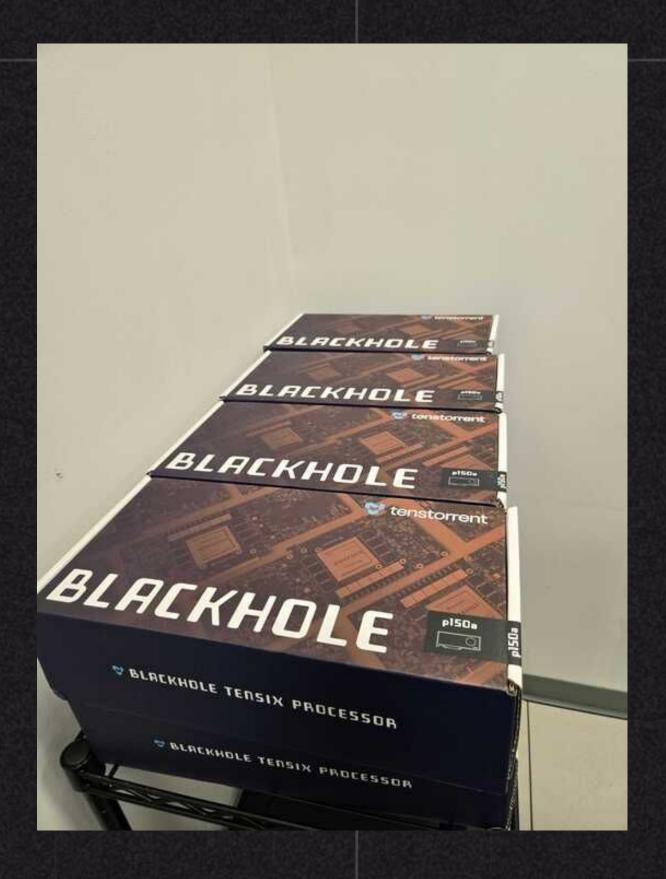


## Powered by Open Hardware











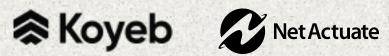




### NetActuate Global Footprint







# GPU hardware is vastly underutilized





## Use Serverless

Automatically adapt infrastructure to demand









# Deploy on Tenstorrent in seconds









Thank you.

### GET STARTED KOYEB

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### Chat with our Team







\$200 on us