

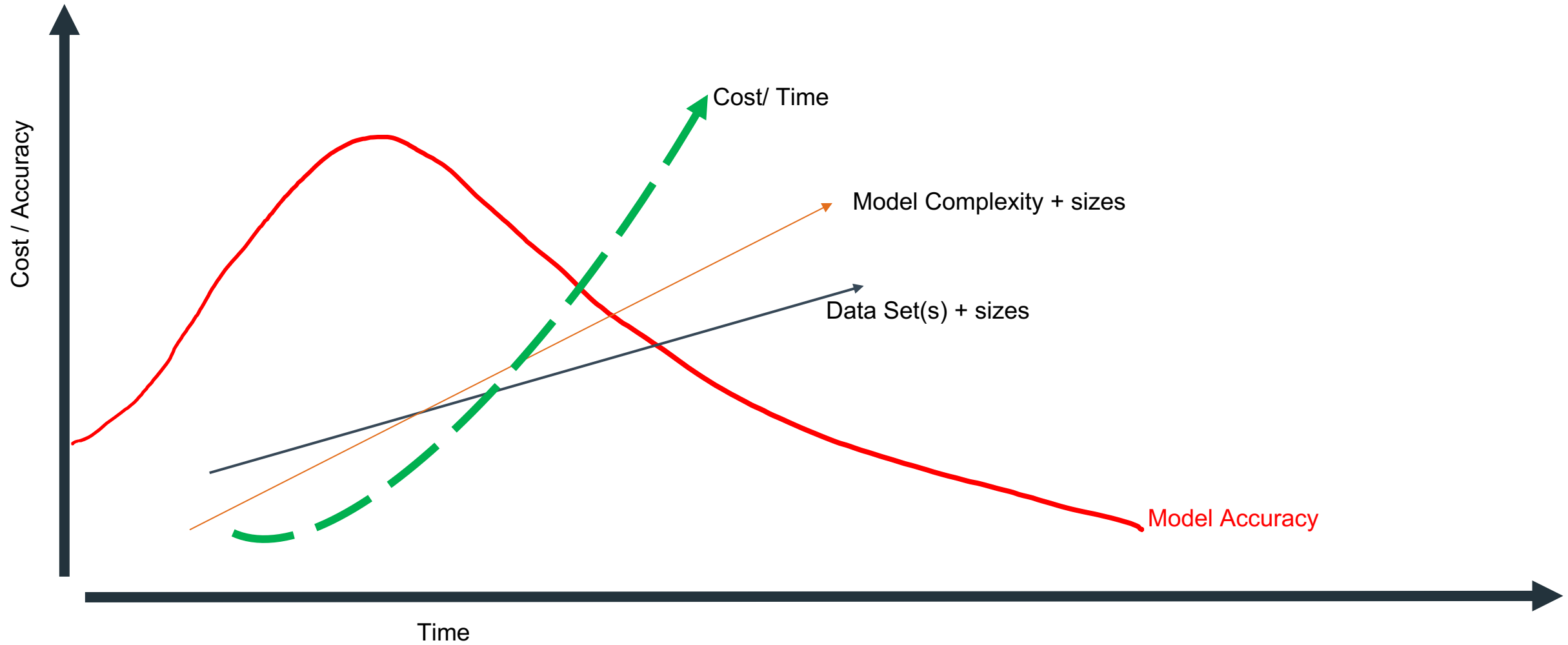


Discovering and Maintaining an Edge in Finance with AI

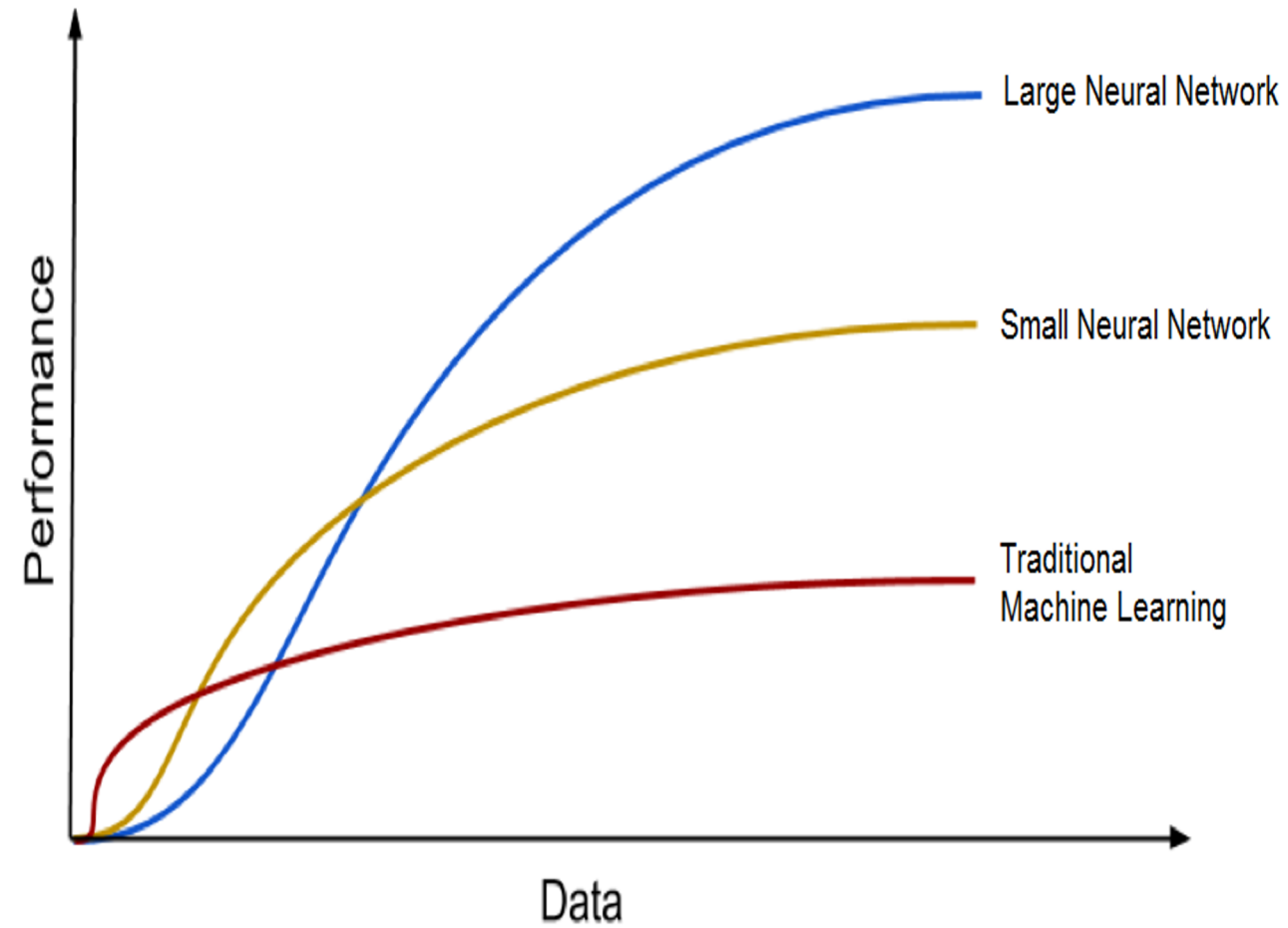
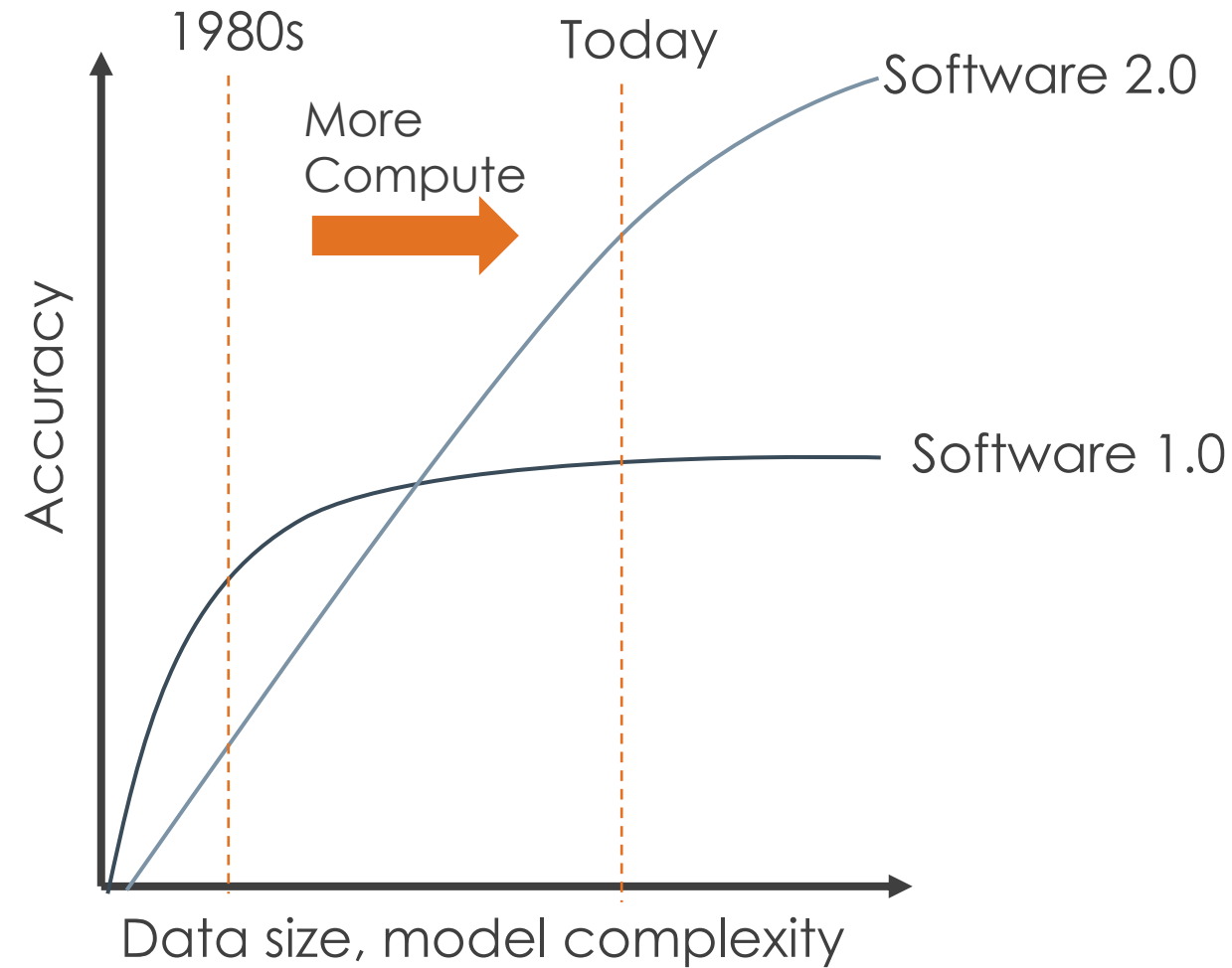
Safe Harbor Statement

The following is intended to outline our general product direction at this time. There is no obligation to update this presentation and the Company's products and direction are always subject to change. This presentation is intended for information purposes only and may not be relied upon for any purchasing, partnership, or other decisions

Industry Trends

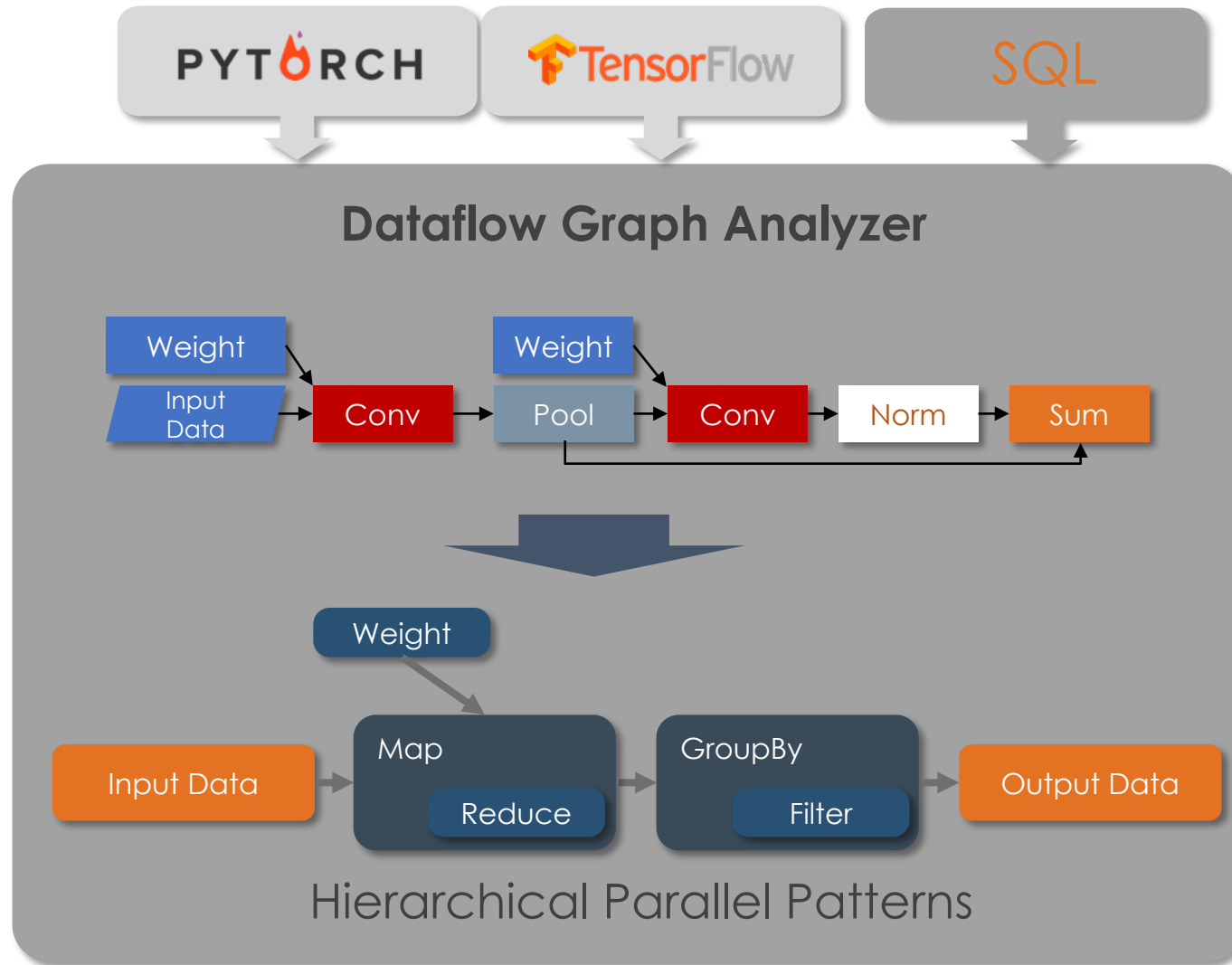


Machine Learning Today: Deep Learning + Software 2.0



Adapted from Jeff Dean
HotChips 2017

Decomposing Dataflow Graphs into Parallel Patterns



Dataflow Architecture Unlocks the Goldilocks Zone

DataScale



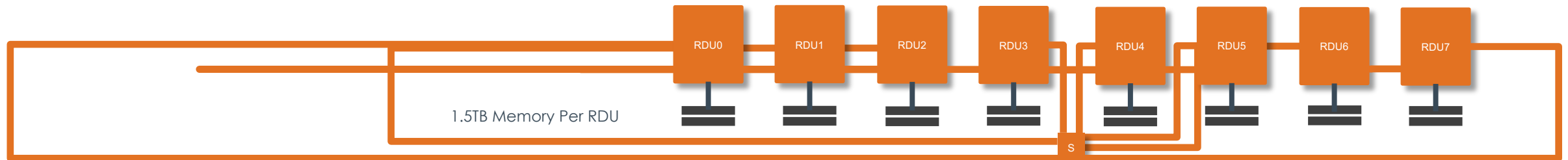
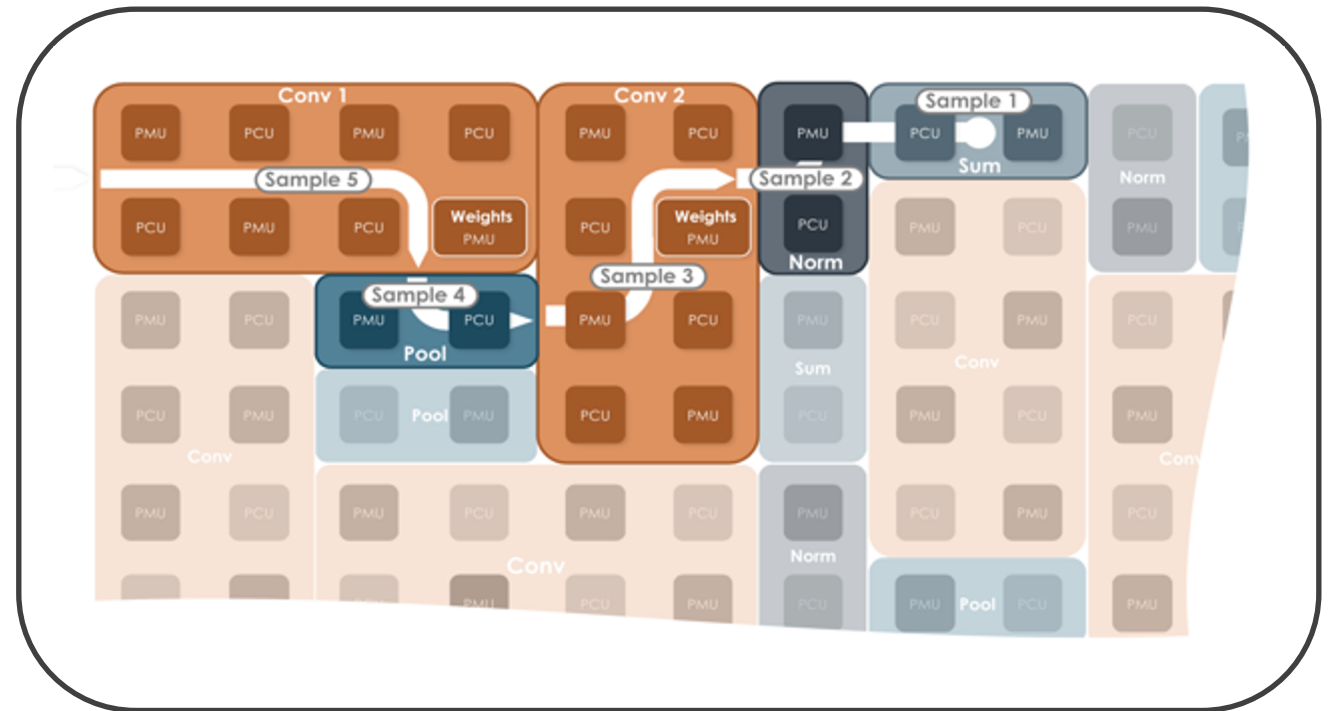
Dataflow Efficiency

+

Compute
Capability

+

Large
Memory Capacity



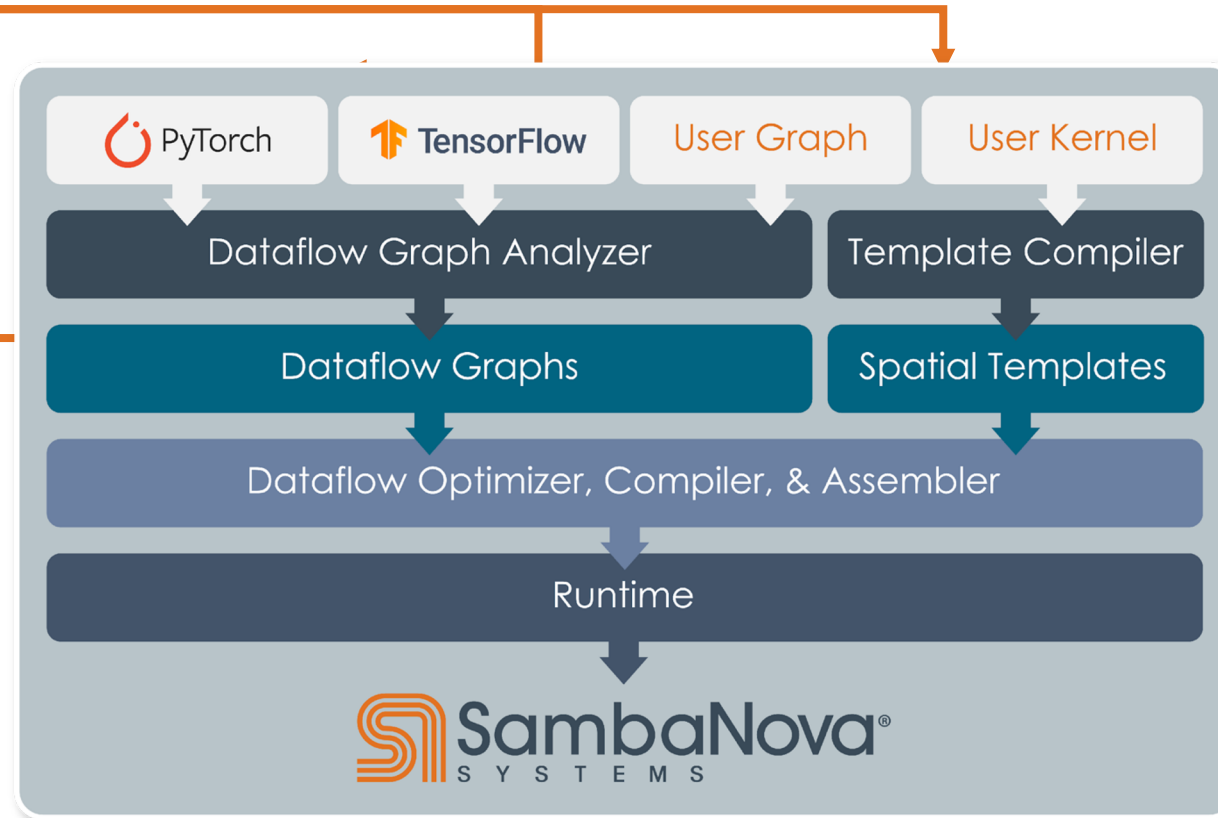
SambaFlow™ Software

Graph Entry Points

- Write to OSS ML frameworks or user's graph
- Push-button automation path

API Entry Point

- User programs to DSL
- Mix of manual and automatic



ML Optimizations

Model parallel
Data parallel

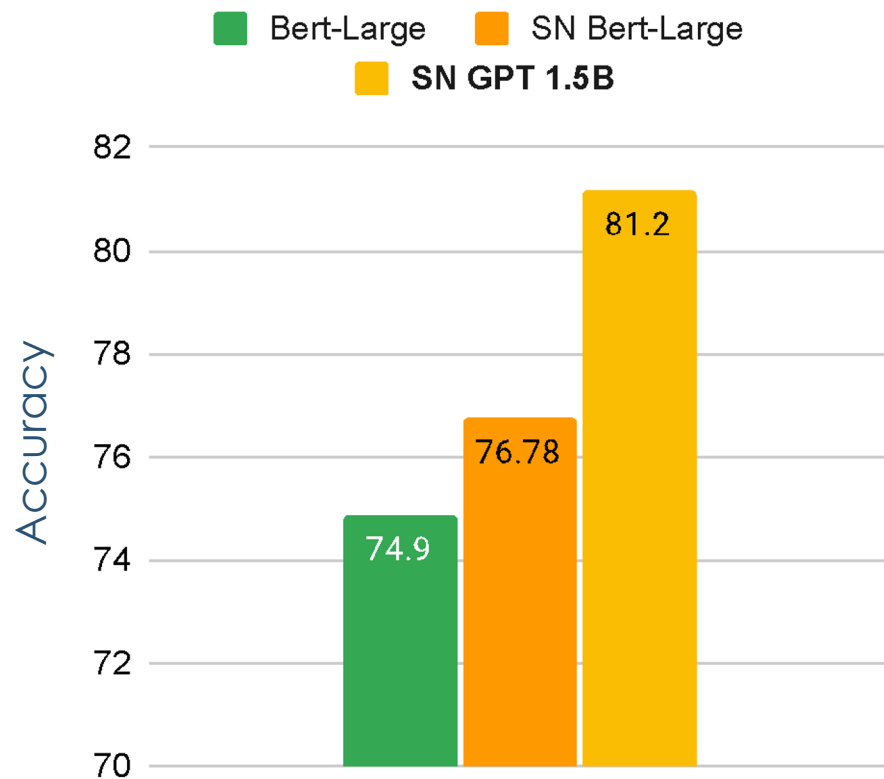
Dataflow Optimizations

Tiling
Op parallel
Streaming
Nested pipelining

State-of-the-art Accuracy in Vertical Domains

Boost over Public Models with **Larger Domain Specific Models**

Finance:
FiQA + PhraseBank



Bert large: public available, no pretraining

SN Bert Large: 8 sockets, 1.5 week pretraining

SN GPT 1.5B: 32 sockets, <1 month pretraining

(Ongoing) SN GPT 175B: 512 sockets, multi-month pretraining

Your Trusted AI Acceleration Partner

Our Awards & Recognition

