CI Expertise: Deciding Which Technologies to Adopt, and When

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Agenda

• (15 minutes) Overview (Story time)
• (5 minutes) Logistics
• (45 minutes) Roundtable (Brainstorming and Large Group Discussion)
• (10 minutes) Wrap-up
Riding the Technology Wave
Riding the Technology Wave
Story Time

Accelerator Card Example
2008 What to pick?

Cell Processor

Vs.

Graphics Processing Unit (GPU)
2008 What to pick?

Cell Processor vs. Graphics Processing Unit (GPU)
2014 What to pick?

Graphics Processing Unit (GPU) vs. Intel Xeon Phi
2014 What to pick?

Vs.

Graphics Processing Unit (GPU) vs. Intel Xeon Phi

K.O.
2018 What to pick?

Vs.

Field Programmable Gate Arrays (FPGA)

Graphics Processing Unit (GPU)
2018 What to pick?

Field Programmable Gate Arrays (FPGA) Vs. Graphics Processing Unit (GPU)
2017 Gartner Hype Cycle

- **Innovation Trigger**
- **Peak of Inflated Expectations**
- **Trough of Disillusionment**
- **Slope of Enlightenment**
- **Plateau of Productivity**

**Years to mainstream adoption:**
- ○ less than 2 years
- ○ 2 to 5 years
- ● 5 to 10 years
- ▲ more than 10 years
- ❌ obsolete before plateau

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**Technologies:***
- Connected Home
- Deep Learning
- Machine Learning
- Autonomous Vehicles
- Nanotube Electronics
- Cognitive Computing
- Blockchain
- Commercial UAVs (Drones)
- Cognitive Expert Advisors
- Virtual Assistants
- IoT Platform
- Smart Robots
- Edge Computing
- Smart Workspace
- Conversational User Interfaces
- Brain-Computer Interface
- Volumetric Displays
- Quantum Computing
- Digital Twin
- Serverless PaaS
- 5G
- Human Augmentation
- Neuromorphic Hardware
- Deep Reinforcement Learning
- Artificial General Intelligence
- 4D Printing
- Smart Dust

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**As of July 2017**
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Large Group Discussion

• I like to engage a group by doing Group Brainstorming. Typically we write on a whiteboard. I would like to experiment with a virtual brainstorming session.

• **People in the room**: Shout out your comments and our in-room zoom note takers will add your comments to zoom group chat.

• **People in zoom land**: Please comment in the group chat window.

• **Facilitator (me)**: I will try to repeat what everyone says and help move the conversation along.

• Remember, there is no bad ideas in brainstorming.
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What technology are you currently considering?
What criteria are used to pick technology to adopt?
What criteria are used to pick when to adopt?
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What did we learn?