The Good, The Bad and The Ugly of AI for IoT and Sensor Network
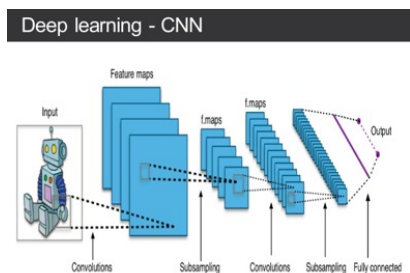
Professor

Department of Information Engineering
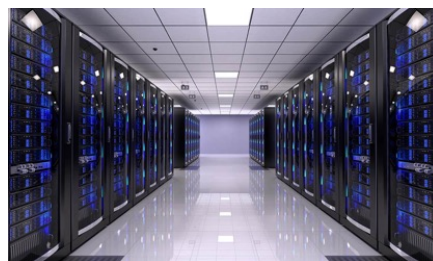
The Chinese University of Hong Kong
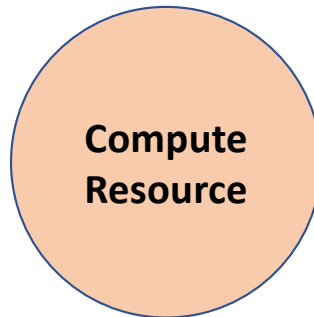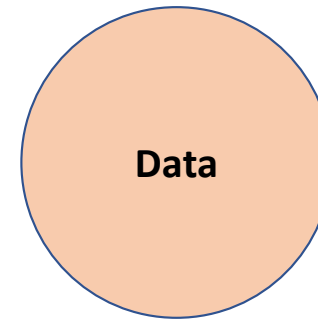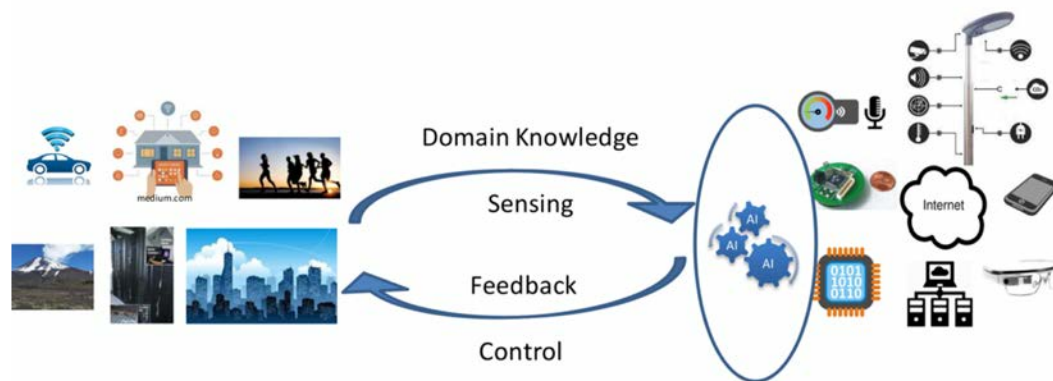
Today's AI Applications: Vision/NLP

Algorithms

Compute Resource

Data

What about IoT

Algorithms

Data

Compute Resource
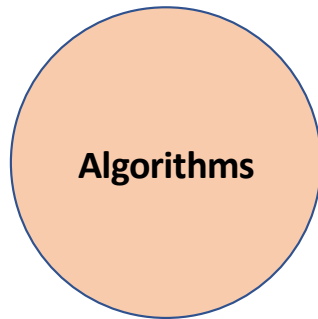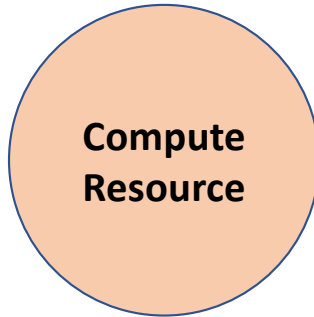
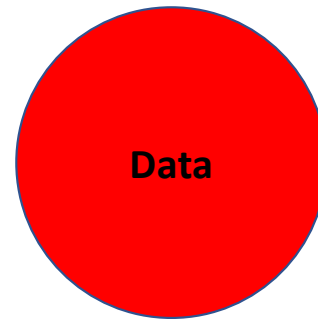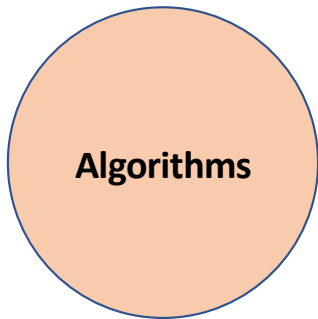# AI Accelorator + Edge/Fog Computing

https://medium.com/syncedreview/tracking-the-transforming-ai-chip-market-bac117359459

What about IoT

Algorithms

Data

Compute Resource
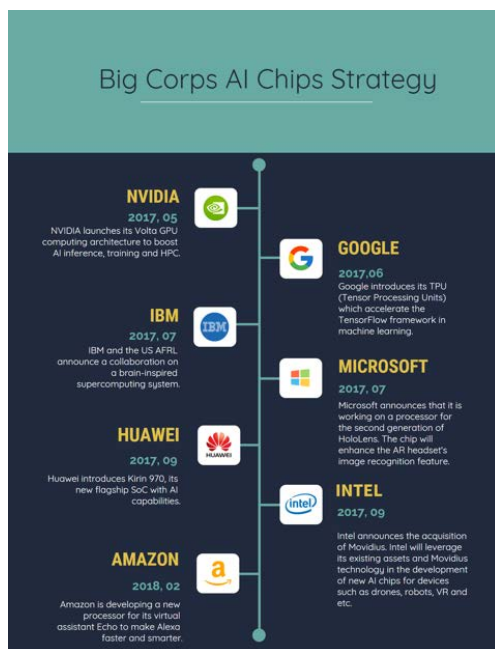
Data Labeling

THE NEW NEW WORLD

How Cheap Labor Drives China's A.I. Ambitions

Workers at the headquarters of Ruijin Technology Company in Jiaxian, in central China's Henan Province. They identify objects in images to help artificial intelligence make sense of the world.
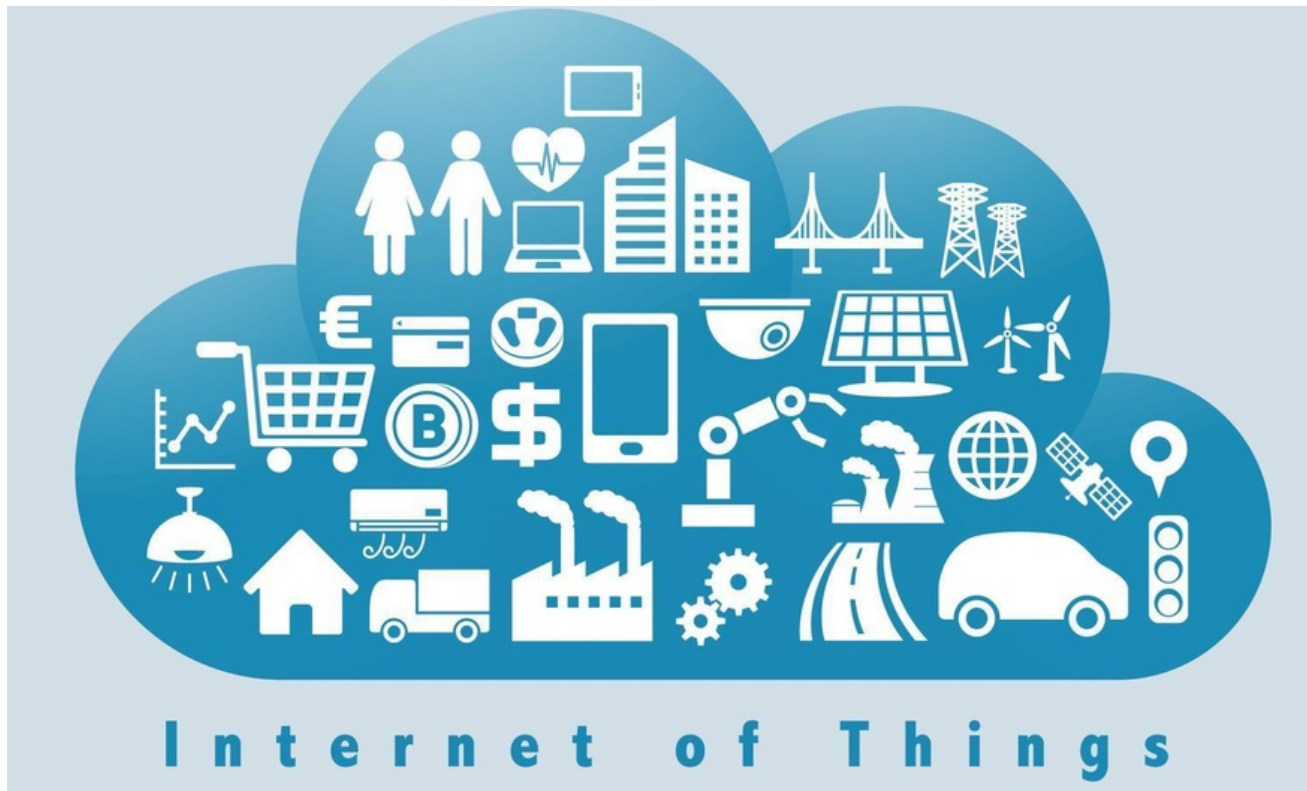Yan Cong for The New York Times

Bloomberg

Technology

Amazon Workers Are Listening to What You Tell Alexa

A global team reviews audio clips in an effort to help the voice-activated assistant respond to commands.
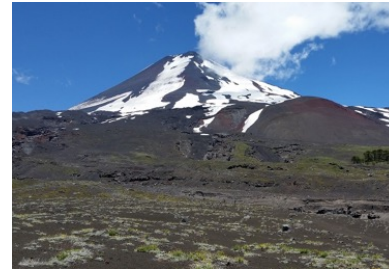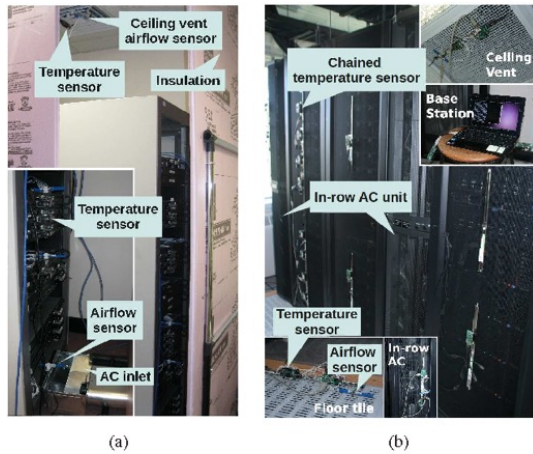
By Matt Day, Giles Turner, and Natalia Drozdiak
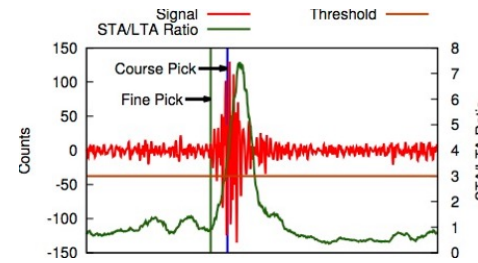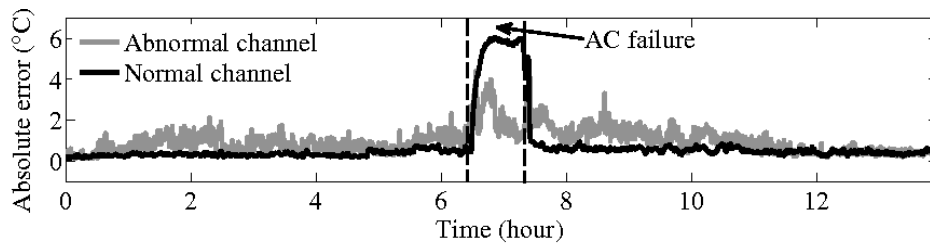April 10, 2019, 6:34 PM GMT-4

Someone's listening to what you tell Alexa

Data Labeling?

Internet of Things

Physical Uncertainty

Figure 5. (a) Single method (b) Replation method (IPSC)

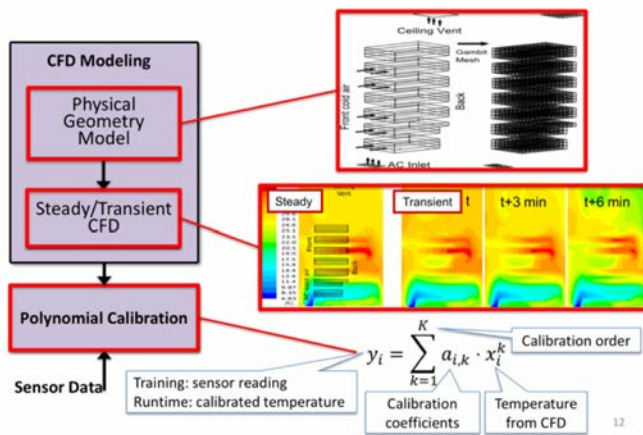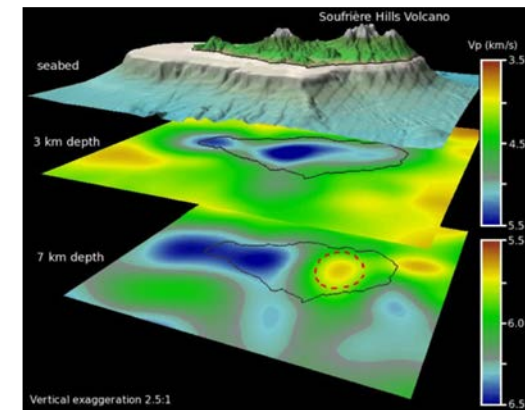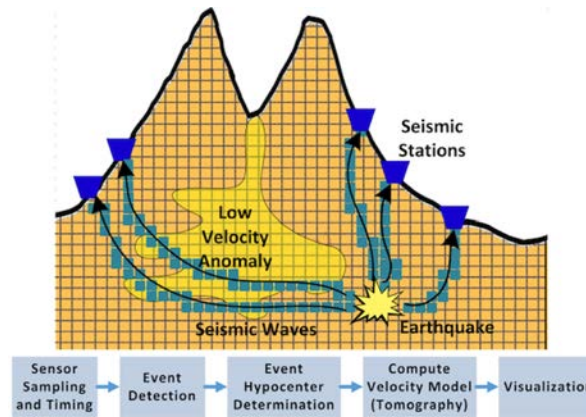Fig. 13. Augmented data temperature prediction error (prediction horizon = 5 minutes)

Llaima Volcano deployment, Chile, 2015

provided by Alfonso Villa

Incorporating Domain Knowledge in ML
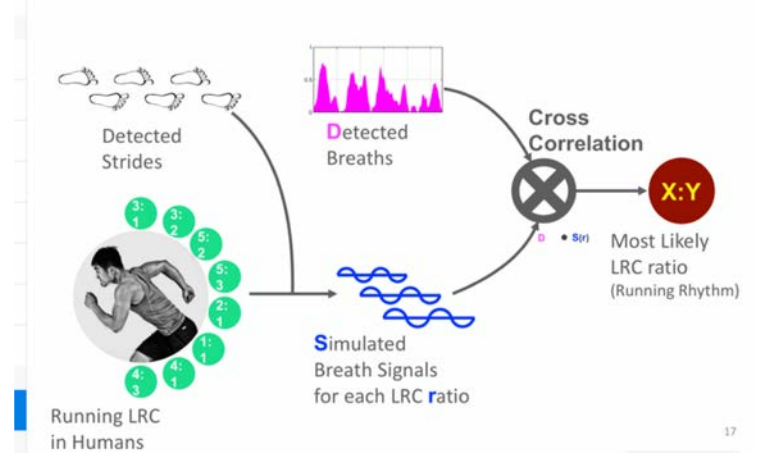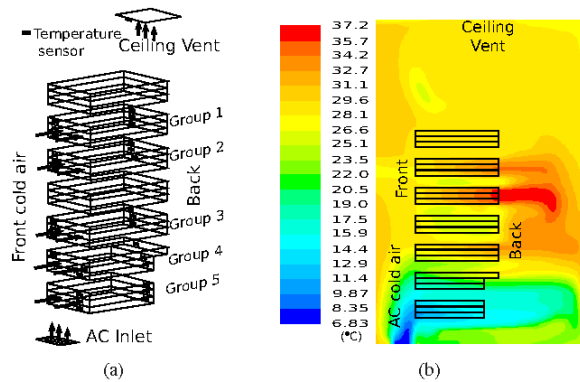
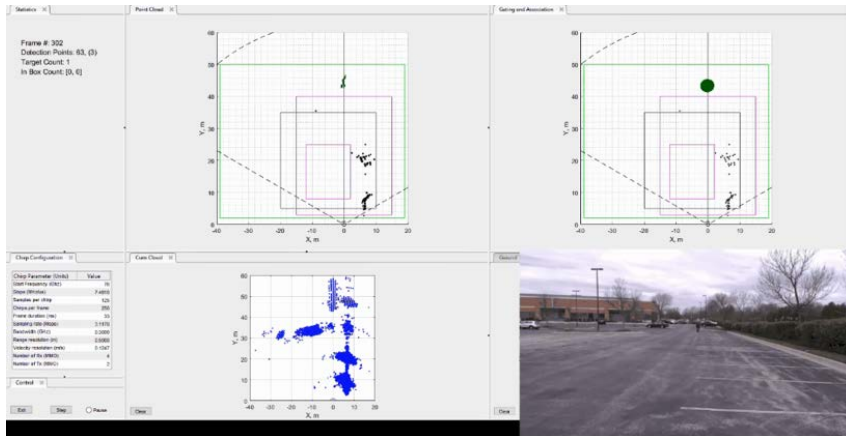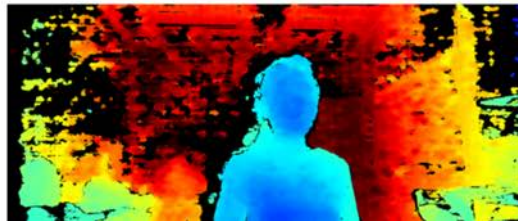# Smart Lampposts
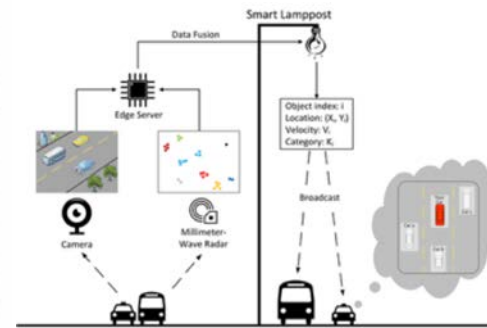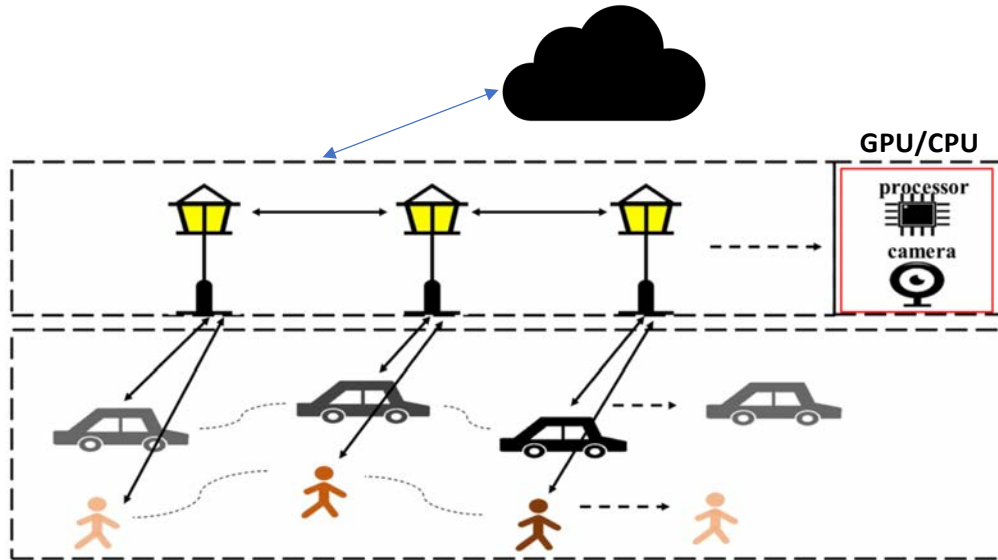
- 140K lampposts X 10 fps X 7 X 24 X 3600

Multi-Sensor Fusion

Texas Instruments