Panel: Opportunities and Challenges of RISC-V in the AIoT Industry

Moderator: Chen-Yi Lee (NCTU)

Ambassador Hotel, Hsinchu Taiwan
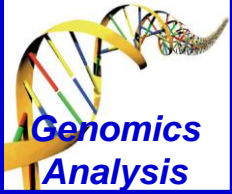
March 12, 2019

- RISC-V is an emerging instruction set architecture and quickly adopted in applications such as AIoT and many more due to openness, compactness, modularity, and extensibility

- With RISC-V ecosystem and its explosive growth potential, the future development is limitless.

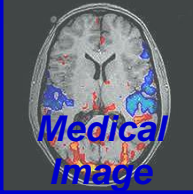- The panel will be focused on the opportunities and challenges RISC-V faces today.

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Biomedical Applications

Genomics Analysis

Medical Image

Healthcare Monitoring

Video Applications

Retinex processed

Quality Adaption

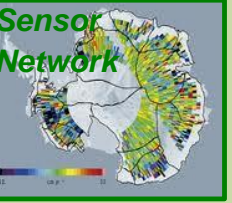**Driving Assistance**

On-demand Object Recognition

Other Applications

Marketing

Adaptive Management

Sensor Network

Other big data source

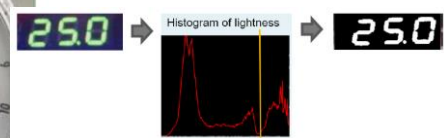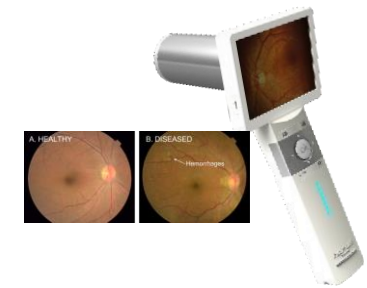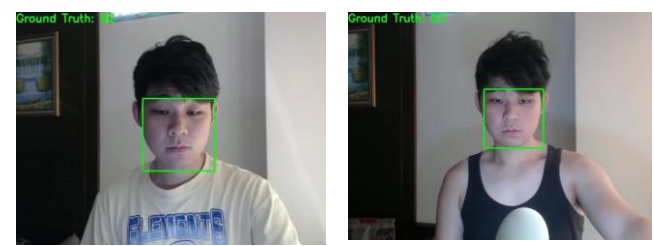## Communication

3G LTE WiFi Internet

Application Service End

Healthcare center, social network, cloud service, analysis

Wearable Translator

National Chiao Tung University
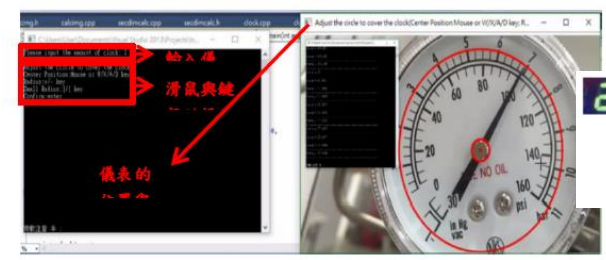
**Rule-based
Expert System**

**Neural and
Fuzzy System**

**CNN & Deep
Neural Networks**

**Autonomous
Learning Networks**

1970   **1980**   **2010**   **2020**

IoT -> AIoT

2012
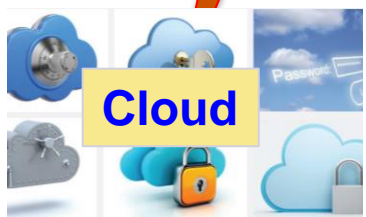
Cloud

**Intelligence: cloud -> device
Security/Energy-Efficiency
Improvement**

RISC-V

Computing Foundry

4

(a) from IoT to AIoT, is RISC-V already well-prepared for the emerging market? If yes, which market will be the first target for RISC-V to come out successful stories?

(b) how to promote RISC-V for the emerging market, especially other embedded processors are already there?

(c) how to promote RISC-V in the industry so that end-users will consider "RISC-V" Inside as a brandname?

(d) any technology roadmap for RISC-V so that user group will become larger and larger for end-product planning?

- Ted Marena
  - Market Chairman/Senior Director, RISC-V Foundation/Western Digital
- Frankwell Lin
  - President, Andes Technology Corp.
- Todd Lin
  - COO, Egis Technology Inc.
- Ted Speers
  - Board Member/Head of PA, RISC-V Foundation/Microchip Technology