

Research Conference Main Points

Artificial Intelligence (AI) : Prof. Mahesha Kapurubandara.

- AI is a very smart system. It keeps learning from data and gets better with time.
- She said teaching AI is like training a dog. (the more we train, the better it behaves)
- AI is already part of our daily life even if we don't notice. Like when we use Siri, Netflix, or online banking, AI is working behind the scenes.
- AI doesn't have feelings, values, or emotions. That's why humans are still in control and must guide it.
- She also talked about climate change and said we must take action. AI and new skills can help us find good solutions.
- One cool example was two university students who used AI in farming. Their system checked soil and weather to water crops at the best time. This saved water and increased profit.
- AI helps not just in IT, but also in health and food. In remote areas, AI is used to connect doctors and patients without travelling.
- AI won't steal jobs. It makes our work easier and helps people to use their talents better. AI needs humans, like how astronauts are needed for spaceships.
- AI and satellites can also be used to protect forests.
- In Sri Lanka, more students are learning about AI now so the field is growing.
- She also mentioned some risks :
 - AI can be unfair, use a lot of power, and increase inequality if not handled well.
- AI becomes what we teach it so we are the ones who shape its future.
- AI can even support us in personal life like helping with stress, mental health, studying, and choosing a career.

Capitalism and Sustainability : Mr. Kalana Muthumuni.

- Sometimes, we know what the world needs, but businesses don't do it because it's not profitable. For example, USA doesn't have a system like LankaPay. They use other apps like Venmo.
- Capitalism focuses more on what brings money, not always what is really needed.
- Credit systems that give loans without asking for big security can help small businesses grow. But, if companies only care about profit and not managing money, they can fail. Like BeeWorks. It became big but collapsed later.
- The idea "profit at any cost" is dangerous. We need a more careful kind of capitalism.
- People like companies who do good things for society. For example, Dilmah donates 15% of their profits to the community.
- Many companies charge more by claiming their products are sustainable. So capitalism and sustainability must go together to survive long-term.
- It's not about growing fast but growing in a good and useful way.

Unconventional Computing : Dr. Ed Braund.

- He talked about using biology, chemicals, and other physical systems to make new computers.
- He explained that current prototypes :
 - biological systems (Physarum machines)
 - chemical systems (Belousov-Zhabotinsky computers
 - physical systems (memristors).
- These systems can fix themselves, grow by themselves, and are more eco friendly.
- One example is Physarum Polycephalum, a slime mold that can solve problems and process data.
- He explained multimodal sensing :
 - using different types of senses to get better results.
- Memristors were also discussed :
 - they are small devices that connect electricity and memory.
- They tried early tests where they used sound (pitches) and voltage to code and read data.
- He also showed ideas for building containers to hold these biological computing parts.