# Keynote Speaker Summaries

## AI and Technology for Global Challenges

***Speaker: Prof.Mahesha Kapurubandara***

### Key Points

- Our world faces unprecedented challenges including climate crises, resource scarcity, social inequality, and escalating waste accumulation.
- Today's youth have unique advantages through advanced capabilities, worldwide networks, and the potential to create impactful innovations.
- AI emerges as a powerful tool for addressing real-world problems across critical sectors like environmental sustainability, medical care, food production, and learning systems.
- Homegrown technological innovations are being successfully implemented across Sri Lanka and broader South/Southeast Asian regions.

### Opportunities

- You’re learning skills previous generation never dreamed of
- You’re more connected and capable of global collaboration
- Even small, purpose-driven ideas can make a big impact

### Risks

- AI inherits human flaws
- Massive electricity demands
- Inequality
- Tech helps, but people solve

## Conclusions

- The future is shaped by young innovators, not just technological advancements.
- AI is no longer confined to tech labs. it's a tool for promoting inclusivity, sustainability, and meaningful change.
- Even students with no prior knowledge of farming created technology that brought real dignity and progress to rural communities.

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## The Intersection of Capitalism and Sustainable Future with AI

***Speaker : Mr.Kalana Muthumuni***

## Key Points

- AI bridges the gap between profit-driven capitalism and sustainable development goals.
- Businesses can boost their earnings while upholding environmental and social responsibility by leveraging AI.
- AI-driven optimization reduces expenses and enhances profits through eco-friendly practices.
- For capitalism to evolve, aligning AI with sustainability strategies is essential.

Bee Works went bankrupt despite being once valued at billions because they mismanaged their finances.
• Delma gives 15% of its earnings to community initiatives.

## Conclusions

- Traditional capitalism can evolve into sustainable capitalism through the strategic use of AI.
- AI enables businesses to balance profit growth with ecological preservation when implemented effectively.
- Early adopters of AI-powered sustainability will secure a strong market edge.
- The business case for AI-driven sustainability grows increasingly compelling.

## Exploring Unconventional Computing: Experiments in Biological Computing

***Speaker : Dr.Edward Braund***

## Key Points

- Unconventional computing explores alternative computational models that break from classical approaches, prioritizing novel languages and architectures.

- Current experimental systems include biological processors (e.g., Physarum machines), chemical computers (e.g., Belousov-Zhabotinsky reactions), and physical components.

- Biological computing systems offer innate problem-solving abilities, self-repair, self-organization, and eco-friendly advantages.

## Conclusions

- Multisensory integration techniques merge diverse inputs to enhance computational performance.
- Physarum-based memristors show promising potential for real-world implementation.
- Bio-inspired computing offers sustainable alternatives to traditional silicon technology.
- The field is transitioning from conceptual research to hands-on experimental development.