Keynote Lecture 1

Sustainable futuristic healthy society

realized through AI-assisted nutritional habits

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Summary

The life sciences have experienced several paradigm shifts in the past, including the discovery of the cell and the rise of molecular biology with the discovery of DNA as a gene. With the recent breakthrough in AI capabilities, the life sciences are now at another turning point. Whereas science has developed through the construction and testing of hypotheses based on theory and consideration, we are now entering an era in which AI can derive optimal solutions and show us the path to a desirable future, as long as we collect teacher data and train machines. By using machine learning with records of daily life, such as what people eat, what they do, and what happens to them, as teacher data, it is now possible to prepare an AI that will work with each individual to figure out what they should eat and how they should live that day in order to become the person they each want to be. To achieve this, it is essential to develop some data acquisition devices as well as open innovation through data sharing based on the understanding of stakeholders (citizens, companies, and government). This presentation will explain how we can create an AI that will partner with us in our daily lives, including food, and present several activities for achieving this goal.