



CAMPUS Asia Plus (Collective Action for Mobility Program of University Students in Asia)

Real Problem Solving Driven Artificial Intelligence
Education Program

Kick off Symposium

AI = The Future of Asia

SPEAKERS



Futurology with AI



Dr. Hajime Hotta
Cinnamon AI Co-Founder, Futurist



Towards the Next
Generation of Artificial
Intelligence with its
Applications in Practice



Dr. Hongxia Yang
Director of AI, Alibaba



ROBOTICS:
Global Issues and Trends



Dr. Junku Yuh
President of Korea Institute of Robotics and
Technology Convergence(KIRO)



Intel Factory
AI Use Cases



Dr. Hai Liang (Duncan) Lee
Principal Engineer, IT at Intel Corporation

March 17. 2022

14:00-18:30 (Japan, Korea)

13:00-17:30 (China, Malaysia)



Join us on Zoom!

<https://us02web.zoom.us/j/81168279840?pwd=TGhZV3NYeUZrYWxPUm90VINJZzZLUT09>



Program

Japan, Korea (China, Malaysia)

10:00 (9:00) Student Workshop (Only participating students)

14:00 (13:00) Opening Address
Dr. Shinji Shimada (President, University of Yamanashi)
Dr. Zhu Zefei (President, Hangzhou Dianzi University)
Dr. Jang Young-Soo (President, Pukyong National University)
Dr. Zaliman Sauli (Vice Chancellor, University Malaysia Perlis)
Report on the Signing of LOI by Presidents
Program Introduction
Xiaoyang Mao (Vice President, University of Yamanashi)

14:30 (13:30) Keynote Speech
Dr. Hajime Hotta (Cinnamon AI Co-Founder, Futurist)
Dr. Hongxia Yang (Director of AI, Alibaba)
Dr. Junku Yuh (President of Korea Institute of Robotics and Technology
Convergence(KIRO))
Dr. Hai Liang (Duncan) Lee (Principal Engineer, IT at Intel Corporation)

16:50 (15:50) Break Time

17:10 (16:10) Presentation of Student Workshop Achievements

17:50 (16:50) Panel Discussions
Theme: Accelerating Asian Student Mobility for the AI Era
Chair: Prof. Yeon Ho Chung, PKNNU, Korea

18:30 (17:30) Closing Remarks

Keynote Speech 1



Futurology with AI

Dr. Hajime Hotta

Cinnamon AI Co-Founder, futurist



Abstract

Transformation is happening now at the global level. With plenty of technologies emerging simultaneously, the world ten years later will be different from that as of now.

What will it look like? Futurology is an attempt to predict the future and explore future possibilities systematically. One entrepreneur community called Singularity University, headquartered in California, is very aggressive in the futurology and the presenter was also a part of their executive program. The experience was very exciting, which never allowed us to talk about the present but we all talk as if we were all in 2045. In this presentation, I'll talk about the latest predictions stated in the community and how we see them as a thought framework.

Biography

Dr. Hajime Hotta is an AI futurist, an early-stage investor, and a serial entrepreneur. He received Ph. D. with a study of neural networks from Keio University, Japan, in 2008. He contributes to Series-D stage company, Cinnamon.AI, which provides unstructured data understanding solutions such as document readers and voice transcription to 100+ big corporates, including Toyota. He recently published a book, "Double Harvest" in Japanese, ranked No.1 in the business category in Amazon.

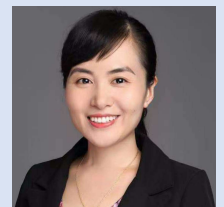
Keynote Speech 2



Towards the Next Generation of Artificial Intelligence with its Applications in Practice

Dr. Hongxia Yang

Director of AI, Alibaba



Abstract

Artificial intelligence has reached or surpassed human standards in the perceptual intelligence fields such as "listening, speaking, and seeing", but it is still in its infancy in the field of cognitive intelligence that requires external knowledge, logical reasoning, or domain migration. After long-term exploration and verification of large-scale online businesses such as Taobao and Alipay, we have built a "super brain" through the extremely large scale pre-training model M6, and built "flexible limbs" through the edge-cloud collaboration platform Gemini, to fully present the comprehensive picture of the next generation of AI. The 10 trillion M6 is currently the world's largest pre-training model, achieving the industry's ultimate low-carbon efficiency. Compared to GPT-3, M6 uses only 1% of the energy consumption which greatly promotes the development of ubiquitous AI. This year, M6 supported the world's largest shopping festival Double 11 for the first time. Relying on its multi-modal understanding ability, M6 greatly improved search and recommendation accuracy of Taobao and Alipay; with its smooth writing ability, M6 created scripts and copywriting for Tmall virtual streamers; depending on its generated high-definition images, M6 has been on duty in Rhino Intelligent Manufacturing and increased the efficiency of designers by 5 times. We developed Gemini, the industry's first edge-cloud collaborative learning framework with the definition of five paradigms: cloud, edge, cloud-centric, edge-centric, and edge-cloud collaboration learning modes. It not only protects data privacy, but also has outstanding performances in personalized recommendations. This talk we will include details of state-of-the-art recommendation system in practice, M6 and Gemini.

Biography

Dr. Hongxia Yang is working as the Director of AI in Alibaba Group. She used to work as the Principal Data Scientist at Yahoo! Inc and Research Staff Member at IBM T.J. Watson Research Center respectively and got her PhD degree in Statistics from Duke University in 2010. She has published over 80 top conference and journal papers and held close to 20 US/Chinese patents. She is leading Alibaba's next-generation breakthrough technology of AI: the development of cognitive intelligence and their applications in practice of big data. She has been awarded the highest prize of the 2019 World Artificial Intelligence Conference, Super AI Leader (SAIL Award), the second prize of the 2020 National Science and Technology Progress Award (China's Top tech award), the 2020 Hangzhou Leading Innovation Team, and the first prize of Science and Technology Progress of the Chinese Institute of Electronics in 2021.

Keynote Speech 3



ROBOTICS: Global Issues and Trends

Dr. Junku Yuh

President of Korea Institute of Robotics and Technology Convergence(KIRO)



Abstract

According to the recent IFR report, 3 million industrial robots are operating in factories around the world. The five major markets for industrial robots are China, Japan, the United States, South Korea, and Germany. Various global trends, such as the fourth industrial revolution, digital transformation (DX), trade tensions, demographic shift associated with an aging population, and social distancing due to the COVID-19 pandemic, are driving the growing demand for robotics across industries and in all business sectors. Many companies also consider nearshoring with automation as a solution to recent global value chain (GVC) issues. According to the Association for Advancing Automation (A3), robot orders in the United States in the third quarter of 2021 were up 35% over the same period in 2020. More than half of the orders are from non-automotive sectors.

This presentation will go over the timeline of innovation in robotics along with milestones of technical evolution. It will also discuss how global trends drive the rise of robotics and what kind of programs major countries offer to stimulate innovation in robotics. Before concluding remarks, various R&D activities carried out by KIRO researchers will also be introduced.

Biography

Prior to KIRO, Dr. Yuh served as the Director of Robotics & Media Institute of KIST and the 5th, 6th President of Korea Aerospace University. Before coming to Korea, he worked for U.S. National Science Foundation (NSF) as the Head of NSF East Asia & Pacific Regional Office in Japan and a Program Director of Information and Intelligent systems in Washington, D.C. He was also Professor of Mechanical Engineering Dept. as well as Information & Computer Science Dept. at the University of Hawaii, Honolulu, Hawaii, U.S.A.

Dr. Yuh is an Elected IEEE Fellow and received various prestigious awards including NSF Presidential Young Investigator Award from former President George Bush. He served as the Editor-in-Chief (EIC) of J. of Intelligent Service Robotics, Advisory Board Member of J. of Autonomous Robots, Editorial Board Member of Int'l J. of Intelligent Automation & Softcomputing, Associate Editor of IEEE Transaction on Robotics & Automation, Program Co-Chair of the IEEE 2001 & 2006 ICRA, and Program Chair of the IEEE 2003 IROS. He has published 12 books and over 120 papers in Robotics, including Introduction to Autonomous Manipulation (G. Marani and J. Yuh) by Springer (2014).

Dr. Yuh received his Ph.D. and M.S. degrees from Oregon State University and B.S. degree from Seoul National University. He also completed IEM program (Institute for Educational Management) offered by the Harvard Institutes for Higher Education, Harvard University, Cambridge, MA.

Keynote Speech 4



Intel Factory AI Use Cases

Dr. Hai Liang (Duncan) Lee

Principal Engineer, IT at Intel Corporation



Abstract

In the keynote, the audience will be grounded on the high level description of Intel manufacturing and the automation systems which forms the backbone our factories. Many have the misnomer that deriving the AI approach and model takes the most time. However that is not what we experience in Intel. We find that we spent most of the time doing data preparation and refinement. AI is not a silver bullet which solves most of the problems in the factory. We only apply AI in certain areas or problems. I will share a compilation of AI Use cases and dive deeper into 2 use case before ending with a summarized takeaway points for the audience

Biography

Duncan Lee is a Principal Engineer in Intel Manufacturing IT with 30 years of IT experience (2 of which is in the United States). He also works on innovative capabilities like AI, IOT, big data analytics to improve the product quality, yield and performance of the factory. Recent successful projects include driving factory machine uptime thru enabling integration cross module PCS, productivity thru predictive preventive maintenance and defect reduction using image analytics (AI and statistics). Duncan architects and integrates various IT/OT capabilities to improve factory performance. Duncan is also a member of the AI Compute Patent Committee in Intel. Duncan has published multiple internal papers and presented key notes in various industrial conferences in Malaysia, China, Singapore, Vietnam and Japan.