



SLOVENIA

Promoting a Smart Society 5.0 through AI and Robotics

11 November 2021

Organized by the Embassy of the Republic of Slovenia in Tokyo

PROGRAM

- 18:45 - 18:50 Pre-recorded speech by H.E. Minister for Digital Transformation of Slovenia, Mr. Mark Boris Andrijanič
- 18:50 - 18:55 Speech by Vice-Minister for Digital Policy, Digital Agency of Japan, Mr. Koichi Akaishi
- 19:00 - 19:10 Speech by the Distinguished Professor at Intelligent Robotics Laboratory, Osaka University, Dr. Hiroshi Ishiguro
- 19:10 - 19:15 Video by Head of DDT Lab, Dr. Maša Jazbec
- 19:15 - 19:20 Video presenting activities of IRCAI
- Pre-recorded speech by Director of UNESCO International Research Centre for Artificial Intelligence (IRCAI), Prof. Dr. John Shawe-Taylor

HOSTED by



H.E. Dr. Ana Polak Petrič,
Ambassador of
the Republic of Slovenia to Japan

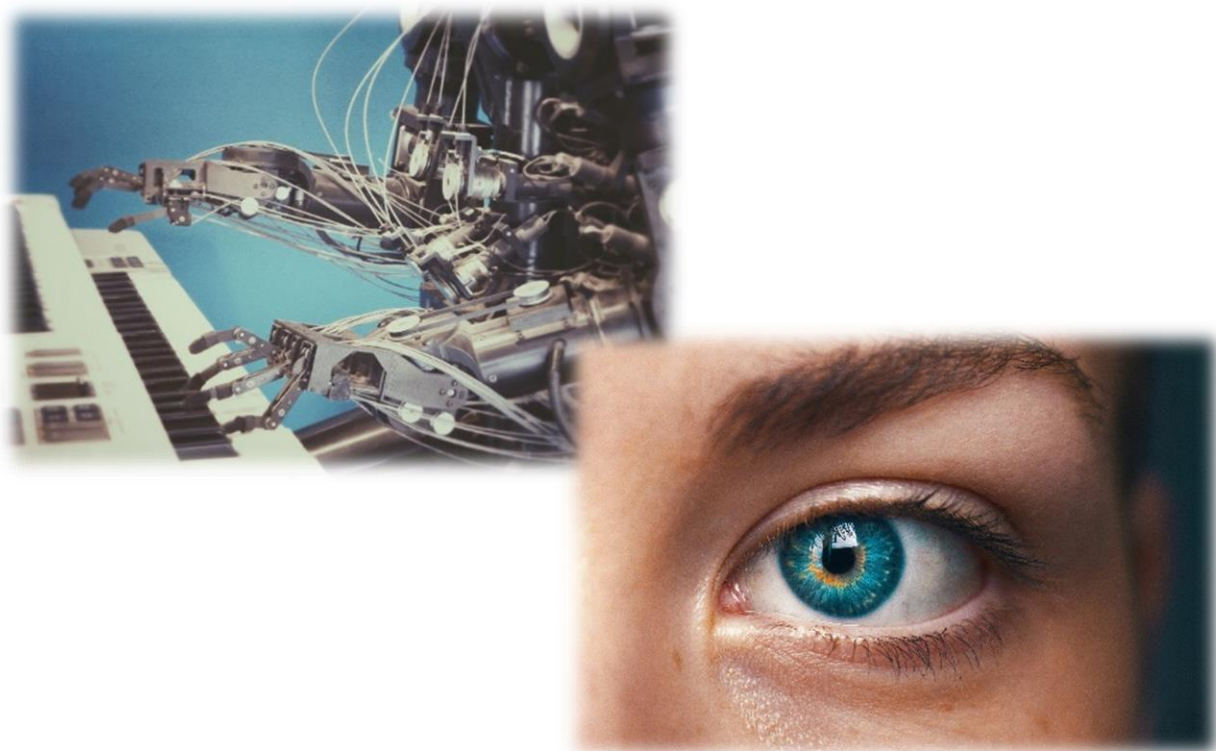
Slovenia cooperates with Japan in promoting society 5.0 through AI and robotics

Slovenia has put forward many advanced solutions, using artificial intelligence and robotics, for the implementation and creation of a smart society 5.0. We would like to introduce some examples of close collaboration with Japan in the fields of art, industry and in policies in general. Japanese technology group Yaskawa has officially opened its new robot production facility with European robotics development centre in Slovenia in 2019. Slovenian artist Maša Jazbec from DDTLab carried out scientific and artistic experiments of interpersonal interactions together with the Laboratory of Professor Hiroshi Ishiguro (HIL), and is now collaborating with Yaskawa on projects of creative robotics.

Hitachi is collaborating in the implementation of a smart city, creating smart electricity grids in a few Slovenian cities. University Rehabilitation Center Soča from Slovenia is cooperating with Toyota and the University Fujita in the field of rehabilitation robotics.

UNESCO International Research Centre for Artificial Intelligence (IRCAI), established in 2020 in Slovenia, is seeking partnerships with international organizations, governments, companies, NGOs, universities, research institutes, AI consortia and government agencies, also in Japan.

In the future, Slovenia would like to enhance cooperation with Japan and explore potential in AI and robotics further.



PARTICIPANTS



H.E. Mr. Mark Boris Andrijanič,
Minister for Digital Transformation of Slovenia

Mark Boris Andrijanič graduated with honours from the Faculty of Law in Ljubljana, and he holds a Master of Public Policy (MPP) degree from the University of Oxford. As of April 2021, he has chaired the Strategic Council for Digitalisation of the Government of the Republic of Slovenia. From 2016 to 2021, he worked for the American technology company Uber, most recently as Head of Public Policy for Central and Eastern Europe. In Slovenia, he co-founded and led a number of NGOs aimed at promoting active citizenship and entrepreneurship, including Mreža idej (Network of Ideas). He has been a speaker at numerous international conferences on new technology both in Europe and the United States.



Mr. Koichi Akaishi,
Vice-Minister for Digital Policy,
Digital Agency of Japan

Mr. Koichi Akaishi, is currently working on the realization of a digital society as the Vice-Minister for Digital Policy at the newly established Digital Agency. Previously, as a Vice-Minister / Secretary General for Science, Technology and Innovation Policy, Cabinet office, Mr. Akaishi was in charge of the overall innovation policy of the Japanese government. He has held various positions in the fields of economic revitalization, environment and energy policy, digitalization, innovation, and international trade.

PARTICIPANTS



Dr. Hiroshi Ishiguro,
Distinguished Professor at Intelligent Robotics
Laboratory, Dept. of Systems Innovation, Graduate
School of Engineer Science, Osaka University

Hiroshi Ishiguro, is distinguished professor of the Intelligent Robotics Laboratory, part of the Department of Systems Innovation in the Graduate School of Engineering Science at Osaka University, Japan, and also a Director of the Hiroshi Ishiguro Special Research Institute at Advanced Telecommunications Research Institute International(ATR), Japan, respectively.

He completed his doctoral studies of engineering at the Graduate School of Engineering Science at Osaka University. He is a robot researcher of engineering specializing in intelligent informatics.

In robot development, Dr. Ishiguro concentrates on the idea of making a robot that is as similar as possible to a live human being.

A notable development of his laboratory is the Actroid, a humanoid robot with lifelike appearance and visible behaviour such as facial movements.

He has been awarded many prizes among those the Best Humanoid Award (Kid size) at RoboCup 2006 (Bremen, Germany), 2011 Osaka Culture Prize, and the Prize for Science and Technology by the Minister of Education, Culture, Sports, Science and Technology (MEXT), 2015, and the Special Award at the 6th (FY2020) Tateishi Prize.



PARTICIPANTS



Dr. Maša Jazbec,
Head of DDT Lab
Intermedia Artist, Curator, Academic Researcher

Maša Jazbec, is an intermedia artist, curator and academic researcher. She holds a Ph.D. in human informatics, attained at the University of Tsukuba (Virtual Reality Lab) in Japan, and MA in interactive art, achieved at Interface Culture program at the University of Arts and Design Linz, Austria. She was a visiting researcher at Ishiguro Laboratory at ATR, Kyoto in Japan. Her latest research interests are mostly focused in social robotics and android science. She is engaged to the vision and execution of the Trbovlje New Media Setting project in Slovenia, and organizes projects and events integrating science, art, technology and society at the international new media culture Speculum Artium festival. She is currently a guest professor at Interface Culture lab at University for Arts and Design Linz, Austria, and is leading the research art laboratory DDTLab (McRUK) in Slovenia.

About the project Neuroyaski:

The NeuroYaski is a unique transfer of technology from the industrial field to the social field, which brings the virtue of humanity to the repetitive robotic arm. The user controls Yaskawa's robotic arm MotoMini via a brain-computer interface – BCI. The brain-computer interface is a powerful computer system that enables direct communication between the brain and the device that we want to control and operate by using the brain. The direction of technology development has changed. From science and engineering, where the emphasis is on technology itself, it has moved towards art and humanization. The main emphasis is on the quality of the experience, excellence and user engagement. The humanization of technology, with a design that combines art, science and economics, helps to restore this important balance. NeuroYaski can be used in rehabilitation, education, creative expression and in teleoperated guidance/control of the robotic arm.



PARTICIPANTS



The International Research Centre on Artificial Intelligence under the auspices of UNESCO (IRCAI)

The International Research Centre for Artificial Intelligence (IRCAI) is a newly established category II centre set up at the Jožef Stefan Institute under the auspices of the United Nations Educational, Scientific and Cultural Organization (UNESCO) as the only centre with a direct focus on Artificial Intelligence (AI) with a global reach. The establishment of the IRCAI centre in Slovenia shows that Slovenian researchers are leaders in this field of scientific research and that Slovenia offers a stimulating environment for the development of such a centre, which deals comprehensively with AI and aims to contribute to the achievements of the UN sustainable development goals. Slovenia has almost five decades of experience in research and a wealth of internationally recognised research results in the AI field. One of the priorities of the Slovenian Presidency of the Council of the EU in 2021 is to strengthen the economic regeneration of the Union based on digital and green transition. IRCAI's activity thus brings added value to the EU's commitment to the sustainable development of digitalisation and AI.



Prof. Dr. John Shawe-Taylor,
Director of IRCAI

John Shawe-Taylor, is the director of IRCAI, UNESCO Chair in AI and the director of the Centre for Computational Statistics and Machine Learning at University College, London (UK). His main research area is statistical learning theory. He has contributed to a number of fields ranging from graph theory through cryptography to statistical learning theory and its applications.

He has recently worked on interactive learning and reinforcement learning. He has also been instrumental in assembling a series of influential European Networks of Excellence (initially the NeuroCOLT projects and later the PASCAL networks). The scientific coordination of these projects has influenced a generation of researchers and promoted the widespread uptake of machine learning in both science and industry that we are currently witnessing.