DWIH Tokyo

Land der Ideen

Artificial Intelligence –
International Research
and Applications:
1st Japanese-German-French
DWIH Symposium

November 21-22, 2018 (Wednesday/Thursday)
Toranomon Hills, Tokyo

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Day 1 – November 21, 2018 (Wednesday)

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Time	Session	Location
14:15 – 14:30	*Change from 4F to 5F*	
14:30 – 15:30	**Wrap-up and Keynote Speech** **Wrap-up: Prof. Dr. Yuichiro Anzai** Senior Advisor, Director of Center for Science Information Analysis, Japan Society for the Promotion of Science (JSPS) **Keynote: Dr. Joseph Reger** Fujitsu Fellow, Chief Technology Officer (CTO), Fujitsu EMEIA	Hall A 3+4 5F

Greetings

Prof. Dr. Margret Wintermantel
President of the German Academic Exchange Service (DAAD)

It is my greatest pleasure and honour to welcome you to the "Artificial Intelligence – International Research and Applications: 1st Japanese-German-French DWIH Symposium".

Artificial Intelligence is one of the most discussed research fields at the present time and it is bound to shape almost every industry sector in the near future. Countries from all around the world are heavily investing in AI research, and we think that in this heated market, collaboration – rather than competition – is the key to finding innovative approaches and to proactively creating the future we would like to live in.

With this vision in mind, the German Centre for Research and Innovation in Tokyo (DWIH Tokyo) organizes the international symposium – gathering experts from Japan, Germany and France. All three countries rely on highly qualified human resources, cutting-edge R&D, and well-established resources of the industrial infrastructure; and all have implemented policy frameworks to encourage cooperation on AI between them.

The symposium offers a platform to learn about the national approaches as well as the status quos and applications of AI research in Japan, Germany, and France. It inspires discussions among researchers and innovation leaders, among the public and private sectors on differences and similarities as well as methods and solutions in the field of AI. Thus, the symposium offers a wide array of perspectives in the area of AI and initiates fruitful technical exchanges and networking between Japan, Germany and France. I am confident that it gives vibrant and new dynamics to trilateral cooperation in AI science and research.

Takuya Hirai
Minister of State for Science and Technology Policy

Japan has proposed "Society 5.0," a new concept of society, under the Fifth Science and Technology Basic Plan. I expect that Society 5.0 will be able to contribute to economic growth as well as the resolution of various global issues such as healthcare, environment, energy, safety and security the world is facing, by providing various services and solutions to people through the high-level fusion of cyber and physical space technologies. I believe Artificial Intelligence (AI) is indispensable for achieving Society 5.0.

Currently, competition for development and implementation of AI is intensifying all over the world, and corresponding to such situation, Japan has also established a headquarter for AI strategy in order to rush to undertake various policies for such as reform of education, R&D, and social implementation of AI. AI, unlike conventional technologies, brings drastic changes to the social and industrial structure. To adapt to the changes, we need to create an AI-ready society by promoting the "Re-design" initiative, which seeks to redesign whole social systems in all fields, including corporate behaviour, working styles, educational systems, and the data utilization environment, with the utilization of AI as a premise. It is impossible to achieve it without fundamental reform of the existing social system. Japan is also promoting efforts toward the realization of AI-ready society as a national commitment. Since AI gives a significant impact to human society, in the AI era, we need to consider the labor environment, care for the elderly person, data security and privacy, well-balanced regulation between promotion of practical use and safety. Furthermore, for the coexistence of AI and humans, we also need to consider such as AI ethical and moral issue, accountability of AI decision, based on human-centric principles.

I hope that stakeholders in Japan, Germany, and France exchange opinions on various issues necessary to realize future AI society and share ideas through this symposium, and we will make progress of AI-ready at a global level. I would like to express my heartfelt appreciation to officials at the German Centre for Research and Innovation Tokyo (DWIH Tokyo) for holding this symposium to provide an opportunity for officials from government, academia, and industry to mingle with each other and exchange opinions. I pray that the partnership and cooperation among the three countries in AI research and social implementation will be strengthened further.

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Greetings

Dr. Frédérique Vidal
Minister for Higher Education, Research and Innovation

Artificial intelligence ranks as a top priority in each of our three countries and its development will impact our very civilisation. Following Cédric Villani's report, France unveiled its AI strategy and has stressed the importance of cooperating with Europe, in particular Germany, our close partner. However, this cooperation must also extend beyond Europe. As we celebrate the 160th anniversary of French-Japanese diplomatic ties, the relationship between France and Japan is as strong as ever and we share common ambitions in the field of science, technology and innovation. In light of this unique bond between our three countries, it is my hope that this symposium will bring us even closer and foster new collaborations between French, German and Japanese AI experts.

Heiko Maas
Federal Minister for Foreign Affairs

The ongoing rapid spread of digital technology throughout society, industry and academia opens up tremendous new opportunities. Emerging technologies generate new working environments and have the potential to advance interconnected transport or healthcare systems.

This massive digital transformation must be closely accompanied by innovative science and research on artificial intelligence. Future societies might use autonomous vehicles, humanoid robots and highly personalised services for their well-being and economic progress. At the same time, such technologies also entail challenges, such as with regard to data protection or cyber security. In order to mitigate potential risks and achieve the most positive outcomes, we need sound advice from the research community. And we also need to think about what digital development implies for society and the economy.

It is therefore necessary to involve the public in one of the most fundamental debates of our time. We need to discuss which sort of future we want and which multilateral rules and standards we might need to establish in order to shape digital transformation and make it a success on a global level.

Co-organised by the German Centre for Research and Innovation Tokyo (DWIH), France and Japan, this trilateral symposium provides an excellent forum to address these issues, support networking among national research activities and foster cooperation on innovative research between policymakers, scientists and the business community. I wish all participants productive and stimulating discussions.

Introduction

The AI Strategy of Japan

Prof. Dr. Yuichiro Anzai

Senior Advisor, Director of Center for Science Information Analysis, Japan Society for the Promotion of Science (JSPS)

The Japanese approach to AI strategy puts collaborative relations between humans and AI as its central component. AI is to benefit society. Therefore, introducing AI into manufacturing, services and distribution, health care and nursing, agriculture, transport and infrastructure, learning and education, as well as other domains, to utilize it in the context of disaster prevention and security, always happens through the frame of thorough ethical and regulatory reflections.

In a horizontally far-stretching dialogue to involve actors and specialists from all sectors, our prior indicators for promoting AI solutions are its implementation and virtuous impact on people's lives. If AI can help us advance to catalyse our intrinsic drive to (humbly) provide the best service possible, then it will fully assimilate into society.

Towards Co-Evolution of AI and Humans

Prof. Dr. Junichi Tsujii

Fellow, National Institute of Advanced Industrial Science and Technology (AIST)

The rapid development of AI technologies has provoked not only positive excitement but equally strong negative sentiment in society. On the one hand, autonomous AI systems can radically improve efficiency and productivity, since they perform tasks without human intervention. On the other hand, autonomy may make humans redundant and, even worse, it may lead to the development of machines which we cannot control. Excessive reliance on AI would demote humans to slaves whose sole role is to gather data, based upon which the AI system would make its own decisions.

Unlike autonomous AI systems, we, as humans, are open autonomous systems, who can communicate, change our goals if needed, and cooperate to achieve mutually agreed, common goals. The current technological challenge is to develop open autonomous AI systems and to realize a society in which AI systems and humans are able to co-evolve intelligently.

Cornerstones of Germanys' AI Strategy

Prof. Dr. Andreas Dengel

Member of the DFKI Management Board, Site Head and Scientific Director at DFKI Kaiserslautern, German Research Center for Artificial Intelligence (DFKI)

This year (2018), the German Government set out cornerstones for an AI strategy. It considers the already strong German research position to develop AI "made in Germany" responsibly and for the benefit of society, to foster data-based value creation and to expand the scientific basis and link up with business and public applications. It includes:

- Strengthen and network the AI Competence Centers combined with appealing working conditions to attract and retain the brightest minds.
- Improve technology access and transfer by using application test fields, model trials, regional clusters with an emphasis on medium-sized enterprises.
- Incorporate AI literacy into more study courses and vocational training, operational experimentation spaces for AI applications.
- Make public authorities pioneers for the secure, transparent and non-discriminatory use of AI considering legal and ethical challenges.

Introduction to the Villani Report

Prof. Dr. Cédric Villani

Vice-President, The French Parliamentary Office for the Evaluation of Scientific and Technological Choices

The President of the French Republic presented his vision and strategy on artificial intelligence (AI) at the Collège de France on March 29th, 2018. It was the result of a six-month mission directed by Professor Cédric Villani and his task force at the request of Prime Minister Edouard Philippe.

The resulting report is built on extensive consultations with all of society's stakeholders, from the hard sciences and humanities to government administrations, entrepreneurs, journalists and writers. It presents the French vision and commitments with regard to AI: Developing an aggressive data policy; Targeting four strategic sectors: health, transport, the environment and defence and security; Boosting the potential of French research; Planning for the impact of AI on labour; Making AI more environmentally friendly; Opening up the black boxes of AI; Ensuring that AI supports inclusivity and diversity.

However, AI cannot be conceived in a purely national framework. France – together with Europe and their partners – must act synergistically to become part of the emerging AI revolution.

New Working Environment with AI (Plenary Session)

Outline:

Artificial Intelligence (AI) will change working environments dramatically. Advances in machine learning will open up new automation potential – even in less stable, less controllable and less predictable work areas. But the great value of AI is not primarily that it can replace humans at work.

Almost all groups of workers will collaborate with AI systems in the future. AI will complement human capabilities and expand them. AI systems help the individual to organize their daily business. They search huge amounts of data, provide relevant information and allow for new insights. They support well-founded decisions by suggesting favorable options. They offer orientation in an increasingly complex digital world. In this way, intelligent machines will expand the sphere of human activity. But they will not take the lead.

The session will discuss the opportunities of AI to make future work more productive and more humane. Current examples of AI systems and related research from France, Japan and Germany illustrate differences and commonalities in the three countries. They serve as a stepping-stone for a discussion on how an AI alliance between France, Japan and Germany can help to accelerate the transfer of AI technologies into successful and responsible economic practice.

AI for Happiness of People
Chair: Dr. Kazuo Yano
Fellow, Hitachi Ltd.

AI at Work – How we Can Shape the Collaboration between Man and Machine
Chair: Dr. Matthias Peissner
Director, Head of Human-Technology Interaction Research Unit, Fraunhofer Institute for Industrial Engineering IAO

How Does AI Change HR and Education Landscape?
Prof. Dr. Masahiro Fukuhara
CEO, Institute for a Global Society, Adjunct Professor, Hitotsubashi University Graduate School, Project Professor, Keio University

AI and the Smart Factory
Klaus Bauer
Head of Development Basic Technology, TRUMPF Werkzeugmaschinen GmbH + Co. KG

The Crucial Importance of Understanding AI
Prof. Dr. Daniel Andler
Emeritus Professor, Department of Philosophy, Paris-Sorbonne University, Senior Scientist, Department of Cognitive Studies, Ecole normale supérieure, PSL University

Interface.ai – Fresh Opportunities to Get Back into the Game
Alexander Diehl
General Partner, Hasso Plattner Ventures

Day1 – November 21, 2018 (Wednesday), 14:00 – 15:30, 15:45 – 16:45

Ethical and Legal Aspects of AI (Break-out Session I)

Outline:

Artificial Intelligence (AI) applications range from intelligent networks to autonomous robots and drones. In consequence, AI's ethical and legal impacts, its challenges and risks, are becoming more and more the subject of public discussion. Some of the questions to be considered are, how researchers and businesses should improve their systems' fairness, accountability and transparency, how misuse of intelligent technologies is to be prevented, and how the relation between humans and machines should be defined. Do we want autonomous organisms and will they be our slaves, equals, superiors or all three? The aim of this session is to alert a wider range of stakeholders of the challenges with which AI will confront our society sooner or later.

Panelists are from various disciplines including AI, Law and Ethics. The latter half of the session will be a workshop, and the audience is expected to actively participate.

AI as a Mirror of Our Society
Dr. Arisa Ema
Project Assistant Professor, Policy Alternatives Research Institute, The University of Tokyo, Visiting Researcher, RIKEN Center for Advanced Intelligence Project

The Challenge of Autonomous Electronic Organisms
Prof. Dr. Christoph von der Malsburg
Senior Fellow, Frankfurt Institute for Advanced Studies

AI Guidelines and Principles on R&D and Utilization
Dr. Akemi Yokota
Associate Professor, Graduate School of Social Science, Chiba University

Autonomous Agents as Legal Persons? A Functional Approach
Dr. Jan-Erik Schirmer
Senior Research Fellow, Humboldt-University Berlin

The Ethics of Affective Computing
Prof. Dr. Laurence Devillers
Professor in Artificial Intelligence, Sorbonne University, Researcher, LIMSI CNRS, Member of CERNA-Allistène

The Role of Digital Technologies in Learning and Education (Break-out Session II)

Outline: [This session is organized by Leibniz Association.]
Digital technologies have a relatively long history in the field of learning and education. From the 1970s onward, intelligent tutoring systems have been an active Artificial Intelligence research and implementation field to facilitate student learning. In the learning sciences, interest in Artificial Intelligence approaches faded a bit in the 1990s when classical, rule-based solutions of tutoring systems ran into some problems. However, the last 15 years led to a renewed interest in Artificial Intelligence in Education, as new methods were deployed that were built on making inferences from large datasets (educational data mining, learning analytics).

Research on the role of digital technologies in learning and education has always been a multidisciplinary endeavor, combining findings from computer science, engineering, cognitive science, psychology, education, and neuroscience. Therefore, it is vital to bring together experts on the understanding of the working of the human mind with experts on the understanding of technological systems.

In line with this idea, this session will introduce, explore, and deepen both the human and the technological facets of the use of digital technologies in learning and education. Four input talks will provide insights into how social scientists and computer scientists approach the field, and the findings and suggestions made in these talks will be commented on by two leading experts in the field. Later, a moderated discussion on digital technologies in learning and education will focus on the potentials and potential challenges that these developments will bring about. This part of the session will be interactive, as questions and comments from the audience are integrated into the discussion.

Chair: Prof. Dr. Yuichiro Anzai
Senior Advisor, Director of Center for Science Information Analysis, Japan Society for the Promotion of Science (JSPS)

Chair: Prof. Dr. Dr. Friedrich W. Hesse
Scientific Vice-President of the Leibniz Association, Scientific Co-Chair of the Global Learning Council

HUMAN FACETS
Learning Needs Heterogeneity and Irritation
Prof. Dr. Ulrike Cress
Executive Director of Leibniz-Institut für Wissensmedien (Knowledge Media Research Center) (IWM), Leibniz Association

From Artificial Intelligence to Artificial Sociality in Learning and Education
Dr. Jürgen Buder
Head of Strategy Department, Leibniz-WissenschaftsCampus Tuebingen "Cognitive Interfaces", Leibniz-Institut für Wissensmedien (Knowledge Media Research Center) (IWM)

TECHNOLOGICAL FACETS
The Role of the Ontological Engineering in Learning and Education
Prof. Dr. Mitsuru Ikeda
Professor, School of Knowledge Science, Knowledge and Management Area, Japan Advanced Institute of Science and Technology (JAIST)

Toward Evidence-Driven Education through User-Centered Learning Analytics
Prof. Dr. Hiroaki Ogata
Professor, Academic Center for Computing and Media Studies, Kyoto University

AI and the Environment / Smart Cities (Break-out Session III)

Outline:

Cities are not just a collection of systems and networks; they are made of people, political institutions and social organisations.

This session will look beyond AI technology and performances to address its impact on the governance and social organisation of cities. The objective will be to analyse the impact of these new capacities on specific aspects, namely:

- The role of political decision-making in a city optimised by AI (city management and city planning);
- The new business models underpinning autonomous services (i.e. those with no operator), which upscale capacities;
- The risks and potential benefits of AI with regards the digital divide and social acceptance in cities;
- The impact of AI on the resilience of cities and people's dependence on them in their everyday lives (the benefits of augmented intelligence vs. the risks of losing individual abilities);
- What space is given to creativity and serendipity in an AI-driven city?

The session will put technological opportunities into political and social perspectives.
Finally, participants will highlight the key political and social choices made while developing AI solutions for cities and illustrate how public authorities and the general population can be part of the decision-making process.

AI and Cities: A Political Issue
Chair: Karine Dognin-Sauze
Vice-President, The Metropole of Lyon in charge of Innovation, Smart City, Digital and Smart Mobility

Chair: Tba

The AI-Powered Smart City: Making Cities Smarter and More Secure
Toshihiko Takayama
Senior Manager, Strategic Solution and Business Development, Cisco Systems G.K.

AI and Energy Transition
Stéphane Tanguy
Chief Information & Technology Officer, EDF Labs

Efforts to Harness Open Innovation Utilising IoT and AI in Yokohama
Hideaki Takagi
Director, New Industry Creation Division, Growth Strategy Promotion Department, Economic Affairs Bureau, City of Yokohama

Day1 – November 21, 2018 (Wednesday), 17:00 – 18:00

AI Shooting Stars (Pitches)

Outline:

In this session, we want to focus on how we can utilize current AI technology.

Shooting stars of AI, trending start-ups and researchers, will introduce thrilling AI solutions and provide answers to the questions: Where are the hotspots of AI and how can we create value in the short term.

Presentations will especially address the increasing integration of IoT and AI - the key to generating data from physical products, processes and transactions in real time.

Chair: Taro Shimada

Chief Strategy Officer, Toshiba Corporation

Shooting Stars:

- Dr. Lena Okajima / Founder & CEO, Astro Live Experiences (ALE)
- Prof. Naoaki Okazaki /School of Computing, Tokyo Institute of Technology
- Roi Shigematsu / Founder & CEO, Fashion Pocket
- Fred Almeida / Co-Founder & Chief Architect, Ascent Robotics
- Toshiyuki Kono / President, AI Cube Inc. (by Yaskawa Electric Corporation)
- Dr. Fabrice Matulic / Senior Researcher, Preferred Networks, inc.
- Yan-Taro Clochard / Director, Secure-IC Japan (tbc)

AI Applications in Health Care (Break-out Session IV)

Outline:

Demographic trends provide a huge challenge for health care systems in industrialized countries like Japan, France and Germany.

AI has the potential to successfully address some of these challenges like shortage of health care professionals, making the rapid growth of medical knowledge available for diagnostic and therapeutic purposes independent of time and location, caring for elderly people in their homes, etc.

This session will discuss the most promising fields of application for AI in health and care, how Japan, France and Germany can combine their strengths to compete in the field and in international markets and how the highest quality outcome for patients can be assured.

Artificial Intelligence in Precision Medicine
Chair: Dr. Kazuhiro Sakurada
Deputy Program Director, Medical Sciences Innovation Hub Program, RIKEN

Do We Need Quality Standards for AI in Health Care?
Chair: Prof. Dr. Klaus Juffernbruch
Professorship for Health & Social Management, FOM University, President, Expert Group "Intelligent Networks in Health Care" at German National Digital-Summit

Cognitive Mirroring: Computational Approach to Developmental Disorders
Dr. Yukie Nagai
Senior Researcher, National Institute of Information and Communications Technology (NICT), Visiting Professor, Bielefeld University

Artificial Intelligence Enables Precision Diagnostics in Clinical Medicine
Prof. Dr. Fabian Kiessling
Director, Institute for Experimental Molecular Imaging, RWTH Aachen University

Using Artificial Intelligence to Personalise Cancer Care
Charlotte Robert
Associate Professor, Paris Sud University, U1030, Gustave Roussy Institute
& Lucas Fidon / Research Scientist, TheraPanacea (startup of Ecole Centrale Paris)

AI Applications in Mobility and Autonomous Driving (Break-out Session V)

Outline:

AI plays a key role for Autonomous Driving, including topics such as intelligent navigation systems, traffic regulation, next-generation delivery services, autonomous taxi services, or on-demand public transport. Market research by a major consultancy company predicts that consumer acceptance of these applications will be comparatively high. Here, consumers associate AI solutions mostly with more convenience and comfort in transport, improved safety and positive environmental effects.

Speakers in this session will discuss various technical and social aspects of applying AI in these areas. These range from the connection between AI technical advances and reform efforts in national traffic regulation, to the use of learned models of the world for generating synthetic data for the training and validation of autonomous vehicles and the introduction of AI-based delivery and dispatch services linked to online mobility service platforms. Additional coverage focuses on intelligent transport systems for automotive as well as railway systems and solutions for predictive maintenance.

Evolution of IoT Services and AI-Enabled Connected Cars
Chair: Dr. Hideyuki Tokuda
President, National Institute of Information and Communications Technology (NICT)

Understanding the World with AI: Training and Validating Smart Machines Using Synthetic Data
Chair: Prof. Dr. Philipp Slusallek
Head in the Research Department of Agents and Simulated Reality, German Research Center for Artificial Intelligence (DFKI), University of Saarbruecken

DeNA's Challenges to Realize Future Mobility Services
Atsushi Yamashita
Senior Manager, Business Development & Management Department, Automotive Business Unit, DeNA Co., Ltd.
& Hirohito Okuda / Senior Manager, AI System Department, DeNA Co., Ltd.

Integrated Uses of Real-Live Data and Synthetic Data for the Development of AI-Based Driving Functions
Prof. Dr. Frank Koester
Head of Departments Automotive Systems, Railway System, Intermodality and Public Transport, Traffic Management, Institute of Transportation Systems, German Aerospace Center (DLR)

AI for Railways: A Challenge for Mobility and Industrial Operations
Dr. Héloïse Nonne
Head of Data Science and Engineering, Digital Department, SNCF group

AI in Connected Industries and Productivity – Current State of the Art and Outlook to New Applications (Break-out Session VI)

Outline:

In this session, we present insights into AI-based applications in industrial use cases. In the light of Industry 4.0, these applications become more and more crucial to gain usage of the vast amounts of data produced by manufacturing and engineering facilities. In this context, many questions arise, for example: How can data be exchanged between partners in a secure and privacy preserving way?, How can we deal with situations, where the facilities – and the data they produce – are decentralised? or How can the data be utilised to improve productivity and efficiency?

Experts from NEC, Schaeffler and Safran Electronics & Defense will present their strategies and current applications which tackle the challenges in employing AI-based methods in an engineering context. The compilation of electronics and computer hardware manufacturers (NEC), automotive suppliers and mechanical engineering (Schaeffler) and aerospace and rocket engine manufacturers (Safran) in this session will provide a broad cross-industry overview of the current state of AI applications.

The session will be chaired by Prof. Dr. Junichi Tsujii, Director of the National Institute of Advanced Industrial Science and Technology AIST, Japan and Dr. Gunar Ernis, Head of Business Unit Industrial Analytics of the Fraunhofer Institute for Intelligent Information and Analysis Systems IAIS, Germany. Both Institutes share the goals to integrate scientific and engineering knowledge to address socioeconomic needs. Through our research, we contribute to the sustainable development of an ecologically sound environment, and an economically successful and socially balanced world.

Challenges in Connected Factories – The Next Phase of the AI Revolution
Chair: Prof. Dr. Junichi Tsujii
Fellow, National Institute of Advanced Industrial Science and Technology (AIST)

Industry 4.0 in Practice - Federated Learning and Data Sovereignty
Chair: Dr. Gunar Ernis
Head of Business Unit Industrial Analytics, Fraunhofer IAIS

Four Waves of AI Business in Connected Industry – NEC the WISE and NEXT
Dr. Satoshi Morinaga
Research Fellow, Data Science Research Laboratories, NEC Corporation

A Self-Learning AI through an Ontology-Driven Architecture
Cedric Oette
Data Analyst, Advanced Data Analytics, Schaeffler Technologies AG & Co. KG

Some of the Challenges of AI in an International High-Technology Group
Dr. Daniel Duclos
Head of Signal & Information Technologies Department, Safran Research Center, Safran SA

Redefining Operator Work Environment with Socio-Technical AI Assistant
Dr. Fabian Schreiber
Head of BMBF Young Research Group SozioTex, Institut für Textiltechnik, RWTH Aachen University

AI Applications in Security and Safety (Break-out Session VII)

Outline:

One of the best-known uses of artificial intelligence is in image and, more recently, facial recognition. This is also an area where AI has shown tremendous progress in recent years. This technology is already employed in many systems designed to ensure security, for example in criminal surveillance, but also on an individual scale or for information protection. Indeed, when combined with biometrics, AI allows for more secure authentication, and by extension, data protection. However, AI is not only about security. It can also bring greater safety in our daily lives, a concept that is often wrongly confused with security. Digital transactions have reached unprecedented levels and continue to grow, yet the digital world is complex and holds its share of dangers. Too often, users are vulnerable to cyber-attacks and to being duped by fraudulent products or transactions in the digital and physical worlds. AI has the potential to make a difference by detecting fraud and protecting systems from cyber-attacks. Despite the many uses of AI in security and safety, there are concerns. Experts warn of AI repeating human biases like discrimination.

This session aims to show how AI can be used to create a safe and secure environment in the digital and physical worlds while remaining a strictly supervised tool unaltered by human preconceptions.
To do so, this session will draw on experts from leading developers of safety and security technologies using AI, as well as promising and innovative newcomers addressing lesser known but equally critical issues.

Face Recognition Technology Research and Development at NEC
Chair: Ken Hanazawa
Deputy General Manager, Biometrics Research Laboratories, NEC Corporation

Chair: David Sadek
Vice-President, Research and Technology, Thalès

Dr. Yuji Sekiya (tbc)
Associate Professor, Information Technology Center, The University of Tokyo

Artificial Intelligence – A Gift and a Curse with Respect to Security and Privacy
Dr. Michael Tagscherer
Chief Technology Officer (CTO), Giesecke + Devrient Mobile Security

Artificial Intelligence – From Research to Business Value
Virginie Haas
Chief Revenue Officer, Shift Technology

AI-Induced Discrimination: Risks and Solutions
Anna Choury
CEO, Maathics

About the German Centre for Research and Innovation Tokyo (DWIH Tokyo)

The German Centre for Research and Innovation Tokyo (DWIH Tokyo) is a forum for German universities, non-university research institutions and research-based companies in Japan. The DWIH represents and promotes Germany as a location for science, research and innovation, supports knowledge exchange on the German and Japanese science, research, and innovation landscapes, communicates between actors of both countries and thus, creates the preconditions for research cooperation. It connects Japan and Germany bi-directionally, in an interdisciplinary fashion, and advocates exchange on future challenges. To do so, it relies on its research-based partners in Germany who facilitate and shape the work of the DWIH on site.

DWIH Tokyo belongs to a global network of five German Centres for Research and Innovation. It is the central exchange and cooperation platform for Japanese and German research institutions, universities, and research-based companies, as well as for the interested public. Since its establishment in 2010, it has been supported by the German Federal Foreign Office. It has been coordinated by the German Academic Exchange Service (DAAD), since 2017.

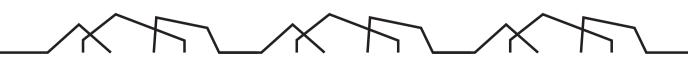### Activities & Services

Exchange and Networks
DWIH Tokyo organizes professional events on focal topics of innovation and research. It operates as an exchange platform for players in science and business: universities and non-university research institutions, intermediary and funding organisations, and research-based companies. By utilizing research competitions, DWIH motivates exchange and interconnectedness between German and Japanese innovators.

Service and Advice
DWIH Tokyo generates fruitful relations and supports concrete collaboration projects by offering individual consultancy. DWIH helps its supporters and other actors in Germany's science and business community to organize events and activities in research marketing in Japan.

Information, Advertising and Marketing
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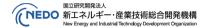Japan Society for the Promotion of Science (JSPS)
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