

Program, Day 1 – November 21, 2018 (Wednesday)

Toranomon Hills, Tokyo

09:00 – 10:45

Opening Remarks

- Prof. Dr. Margret Wintermantel / President, German Academic Exchange Service (DAAD)
- Dr. Hans Carl von Werthern / Ambassador of the Federal Republic of Germany to Japan
- Laurent Pic / Ambassador of France to Japan
- Takuya Hirai / Minister of State for Science and Technology Policy

Welcome Address

- *Germany's Strategy on Artificial Intelligence*

Dr. Herbert Zeisel / Deputy Director General: Research for Digital Change and Innovation, Federal Ministry of Education and Research (BMBF)

Keynote Speeches

- *Research Activities of the AIRC in the Context of Society 5.0*

Prof. Dr. Junichi Tsujii / Fellow, National Institute of Advanced Industrial Science and Technology (AIST), Director, Artificial Intelligence Research Center (AIRC), AIST

- *Augmented Intelligence - Towards Self-Learning Machines*

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)

10:45 – 11:15

Coffee Break

11:15 – 12:45

Plenary Session: New Working Environment with AI

- *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?*

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

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| | <ul style="list-style-type: none"> • <i>The Crucial Importance of Understanding AI</i> Prof. Dr. Daniel Andler / Emeritus Professor, Department of Philosophy, Paris-Sorbonne University, Senior Scientist, Department of Cognitive Studies, Ecole normale supérieure, PSL University • <i>Interface.ai - Fresh Opportunities to Get Back into the Game</i> Alexander Diehl / General Partner, Hasso Plattner Ventures |
| 12:45 – 13:00 | Sneak-Preview on Break-Out Sessions I-III |
| 13:00 – 14:00 | Lunch Break |
| 14:00 – 15:30 (15 min. coffee break) 15:45 – 16:45 | <p>Break-out Session (parallel): Social Impact of Artificial Intelligence</p> <p>I Ethical and Legal Aspects of AI</p> <ul style="list-style-type: none"> • <i>AI as a Mirror of Our Society</i> Chair: Dr. Arisa Ema / Project Assistant Professor, Policy Alternatives Research Institute, The University of Tokyo, Visiting Researcher, RIKEN Center for Advanced Intelligence Project • <i>The Challenge of Autonomous Electronic Organisms</i> Chair: Prof. Dr. Christoph von der Malsburg / Senior Fellow, Frankfurt Institute for Advanced Studies • <i>AI Guidelines and Principles on R&D and Utilization</i> Dr. Akemi Yokota / Associate Professor, Graduate School of Social Sciences, Chiba University • <i>Autonomous Agents as Legal Persons? A Functional Approach</i> Dr. Jan-Erik Schirmer / Senior Research Fellow, Humboldt-University Berlin • <i>The Ethics of Affective Computing</i> Prof. Dr. Laurence Devillers / Professor in Artificial Intelligence, Sorbonne University, Researcher, LIMSI CNRS, Member of CERNA-Allistène |

14:00 – 15:30

(15 min. coffee
break)

15:45 – 16:45

II The Role of Digital Technologies in Learning and Education (organised by Leibniz Association)

- 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, 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

III AI and the Environment / Smart Cities

- *Sustainable Living Architecture*
Chair: Hiroaki Kitano / CEO, Sony Computer Science Laboratories, Inc.
- *AI & Cities: A Governance Issue*
Chair: Dr. Amélie Cordier / Chief Scientific Officer, Hoomano, President, "Lyon iS AI"
- *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

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| | <ul style="list-style-type: none"> • <i>Efforts to Harness Open Innovation Utilising IoT and AI in Yokohama</i> Hideaki Takagi / Director, New Industry Creation Division, Growth Strategy Promotion Department, Economic Affairs Bureau, City of Yokohama |
| 17:00 – 18:00 | <p>Plenary Session: AI Shooting Stars</p> <ul style="list-style-type: none"> • Chair: Taro Shimada / Chief Strategy Officer, Toshiba Corporation • 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 • Toshiyuki Kono / President, AI Cube Inc. (by Yaskawa Electric Corporation) • Fred Almeida / Co-Founder, Chief Architect, Ascent Robotics • Mariko Takahashi / Medical Business Department, LPixel Inc. • Prof. Dr. Hiroshi Maruyama / PFN Fellow, Preferred Networks, Inc. • Tim S. Miksche / Chief Representative Japan, Artisense Corporation |

Program, Day 2 – November 22, 2018 (Thursday)

Toranomon Hills, Tokyo

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| 09:00 – 10:15 | <p>Keynote Speeches and Discussion</p> <ul style="list-style-type: none"> • <i>Artificial Intelligence for Humanity</i> Prof. Dr. Cédric Villani / Vice-President, The French Parliamentary Office for the Evaluation of Scientific and Technological Choices • <i>Opportunities Offered by Robotics and Artificial Intelligence for Our Future</i> Prof. Dr. Wolfram Burgard / Head of Research Lab AI Systems, Albert-Ludwigs-University Freiburg, President, IEEE Robotics and Automation Society (IEEE RAS) |
| 10:15 – 10:30 | <i>Change from 5F to 4F</i> |
| 10:30 – 12:00 (45 min. lunch break) 12:45 – 13:45 | <p>Break-out Session (parallel): Technological Applications of Artificial Intelligence</p> <p>IV AI Applications in Health Care</p> <ul style="list-style-type: none"> • <i>Artificial Intelligence in Precision Medicine</i> Chair: Dr. Kazuhiro Sakurada / Deputy Program Director, Medical Sciences Innovation Hub Program, RIKEN • <i>Do We Need Quality Standards for AI in Health Care?</i> Chair: Prof. Dr. Klaus Juffernbruch / Professorship for Health & Social Management, FOM University, |

November 20, 2018

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| | <p>President, Expert Group „Intelligent Networks in Health Care“ at German National Digital-Summit</p> <ul style="list-style-type: none"> • <i>Cognitive Mirroring: Computational Approach to Developmental Disorders</i> Dr. Yukie Nagai / Senior Researcher, National Institute of Information and Communications Technology (NICT), Visiting Professor, Bielefeld University • <i>Artificial Intelligence Enables Precision Diagnostics in Clinical Medicine</i> Prof. Dr. Fabian Kiessling / Director, Institute for Experimental Molecular Imaging, RWTH Aachen University • <i>Using Artificial Intelligence to Personalise Cancer Care</i> Charlotte Robert / Associate Professor, Paris Sud University, U1030, Gustave Roussy Institute & Lucas Fidon / Research Scientist, TheraPanacea (startup of Ecole Centrale Paris) |
| <p>10:30 – 12:00 (45 min. lunch break) 12:45 – 13:45</p> | <p>V AI Applications in Mobility and Autonomous Driving</p> <ul style="list-style-type: none"> • <i>Evolution of IoT Services and AI-Enabled Connected Cars</i> Chair: Dr. Hideyuki Tokuda / President, National Institute of Information and Communications Technology (NICT) • <i>Understanding the World with AI: Training and Validating Smart Machines Using Synthetic Data</i> 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 • <i>DeNA's Challenges to Realize Future Mobility Services</i> Atsushi Yamashita / Senior Manager, Business Development & Management Department, Automotive Business Unit, DeNA Co., Ltd. & Hirohito Okuda / Senior Manager, AI System Department, DeNA Co., Ltd. • <i>Integrated Uses of Real-Live Data and Synthetic Data for the Development of AI-Based Driving Functions</i> 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) • <i>AI for Railways: A Challenge for Mobility and Industrial Operations</i> Dr. H elo ise Nonne / Head of Data Science and Engineering, Digital Department, SNCF group |
| <p>10:30 – 12:00 (45 min. lunch break) 12:45 – 13:45</p> | <p>VI AI in Connected Industries and Productivity – Current State of the Art and Outlook to New Applications</p> <ul style="list-style-type: none"> • <i>Challenges in Connected Factories – The Next Phase of the AI Revolution</i> Chair: Prof. Dr. Junichi Tsujii / Fellow, National Institute of Advanced Industrial Science and Technology (AIST), Director, Artificial Intelligence Research Center (AIRC), AIST • <i>Industry 4.0 in Practice - Federated Learning and Data Sovereignty</i> Chair: Dr. Gunar Ernis / Head of Business Unit Industrial Analytics, Fraunhofer IAIS • <i>Four Waves of AI Business in Connected Industry – NEC the WISE and NEXT</i> Dr. Satoshi Morinaga / Research Fellow, Data Science Research Laboratories, NEC Corporation • <i>A Self-Learning AI through an Ontology-Driven Architecture</i> |

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| | <p>Cedric Oette / Data Analyst, Data Science & AI, Schaeffler Technologies AG & Co. KG</p> <ul style="list-style-type: none"> • <i>Some of the Challenges of AI in an International High-Technology Group</i> <p>Dr. Daniel Duclos / Head of Signal & Information Technologies Department, Safran Research Center, Safran SA</p> <ul style="list-style-type: none"> • <i>Redefining Operator Work Environment with Socio-Technical AI Assistant</i> <p>Dr. Fabian Schreiber / Head of BMBF Young Research Group SozioTex, Institut für Textiltechnik, RWTH Aachen University</p> |
| 10:30 – 12:00 (45 min. lunch break) | <p>VII AI Applications in Security and Safety</p> <ul style="list-style-type: none"> • <i>Face Recognition Technology Research and Development at NEC</i> <p>Chair: Ken Hanazawa / Deputy General Manager, Biometrics Research Laboratories, NEC Corporation</p> <ul style="list-style-type: none"> • <i>Defensive and offensive AI for embedded cyber-security</i> <p>Chair: Yan-Taro Clochard / Director, Secure-IC Japan, Head of Sales North Asia</p> <ul style="list-style-type: none"> • <i>Cybersecurity Incident/Response Assistance using AI Technology</i> <p>Dr. Yuji Sekiya / Associate Professor, Information Technology Center, The University of Tokyo (tbc)</p> <ul style="list-style-type: none"> • <i>Artificial Intelligence - A Gift and a Curse with Respect to Security and Privacy</i> <p>Dr. Michael Tagscherer / Chief Technology Officer (CTO), Giesecke + Devrient Mobile Security</p> <ul style="list-style-type: none"> • <i>Artificial Intelligence: From Research to Business Value</i> <p>Virginie Haas / Chief Revenue Officer, Shift Technology</p> <ul style="list-style-type: none"> • <i>AI-Induced Discrimination: Risks and Solutions</i> <p>Anna Choury / CEO, Maathics</p> |
| 13:45 – 14:00 | <i>Change from 4F to 5F</i> |
| 14:00 – 15:00 | <p>Wrap-up and Keynote Speech</p> <ul style="list-style-type: none"> • Wrap-up: Prof. Dr. Yuichiro Anzai / Senior Advisor, Director of Center for Science Information Analysis, Japan Society for the Promotion of Science (JSPS) • <i>AI: Views from the Vanishing Point</i> <p>Keynote: Dr. Joseph Reger / Fujitsu Fellow, Chief Technology Officer (CTO), Fujitsu EMEA</p> |