Invited Speaker 1-1:
Titles: IS1-1-1 Engineering Modular Playware
IS1-1-2 User-Friendly Robotics 3 – Playware

Dr. Henrik Hautop Lund is Professor at Technical University of Denmark, is head of the Center for Playware, and has published more than 175 scientific papers and several patents. He has served in the Danish National Research Council. He is World Champion in RoboCup Humanoids

henrik.hautop.lund@gmail.com

Freestyle 2002, has developed shape-shifting modular robots, and has collaborated closely on robotics, ALife and AI with
companies like LEGO, Kompan, BandaiNamco, etc. for the past two decades. His Center for Playware at the Technical University of Denmark has a long track record of developing modular robotic playware for playful contextualized IT training in Sub-Saharan Africa, for playful rehabilitation for sport, for music, for wearable, for play, and for education. These modular playware technology developments include I-Blocks (LEGO bricks with processing power) and modular interactive tiles (larger bricks for physical rehab). Further, with the development of East-Africa's first science and business park, local entrepreneurship has been fostered amongst students graduating from the university degree programs in contextualized IT. Combining such skills, it became possible to develop technical skill enhancing football games and global connectivity based on modular playware for townships in South Africa for the FIFA World Cup 2010. Lately, together with international pop star and World music promoter Peter Gabriel, he has developed the MusicTiles app as a music 2.0 experience to enhance music creativity amongst everybody, even people with no initial musical skills whatsoever, and made physical modules for Peter Gabriel's live stage performance. In all cases, professor Henrik Hautop Lund and his research center develop modular playware technology in a playful way to enhance learning and creativity amongst anybody, anywhere, anytime.

Invited Speaker 1-2

Titles: IS1-2-1 User-Friendly Robotics 1 - AI Software

IS1-2-2 User-Friendly Robotics 2- Interfacing Robotics with any user

Luigipagliarini@gmail.com

Dr. Luigi Pagliarini is Professor of The Academy of Fine Arts of Macerata, Italy, an artist, psychologist, multimedia and software designer, expert in robotics, AI and Artificial Life. He is currently Professor at the Academy of Fine Arts of Macerata (Italy) and Consultant Professor at DTU Center for Playware (Denmark). He has published in different international books, journals, congresses and conferences proceedings and has been rewarded with international prizes more than once. He has exhibited his work in different museums and institutions all over the world. Luigi Pagliarini has also worked for many different institutes and universities as professor or researcher and, as consultant, with many enterprises and multinational factories. His work has often been reported on many international newspapers, magazines and televisions.

Invited Speaker 2: Professor Young Im Cho (Gachon University, Korea)

Title: IS-2 Aritificial Intelligence for Sustainability in Smart City and life

yicho@gachon.ac.kr

Professor Young Im Cho is Chairman of AI & Smart City Laboratory at Gachon University since 2016-. She is Chairman of Korea Intelligent System Society(Since 2018/1), Member of the Smart City Special Committee of KOREA PRESIDENT(since 2017/11), Member of e-Government Driving Forum(since 2015.3), Board Member of National Information Society (public) Board Member of Korea Local Information Research and Development Institute (public), Committee member of Public Open Data Committee at Ministry of Interior in Korea, e-Government Committee Member at Ministry of Interior in Korea, Committee member of Intelligent Society at Ministry of Science, ICT and Future Planning ('16.5~), Committee, member of e-Government at Ministry of Interior('16.4~) since 2014/1. She was Visiting Professor at Purdue University (USA)(2013.8~2014.2). She is A Committee Member of National ICT Strategies in Korea Government 3.0 Committee Member at Ministry of Interior (Korea) & Chairman of Smart City Forum in Korea since 2011.

2010~2012	Chairman of University Industry Technology Force Team (UNITEF)
2010~2012	President Council of National Information Strategy Committee in Korea
2010~Current	Committee Member of Ministry of Science and Future Planning Ministry of Education Ministry of the Interior Ministry of Land and Transportation Incheon City, Smart City Committee Board member Gyeonggi province, Smart City Committee Board member

2000~2017	Vice President of Korea Intelligent System Society Korea Engineering Education Society Director of Korea Information System Society Institute of Control Automation System Society
2005~2015	Professor at Suwon University (Head of Information Center, Chairman of Smart City Center)
2004~2010	Chairman of Ubiquitous Informatization Driving Force Team at Pyeongtaek City in Korea
2006~2008	ICT Consultant Member of Korea Consumer Protection Board
1996~2005	Professor at University of Pyeongtaek
1999~2000	Post-doc. at University of Massachusetts at Amherst, USA
1995~1996	Senior Researcher of Samsung Electronics

Research Filed:
Artificial Intelligence, Smart City, Big data, Agent system, Intelligent Robots etc.

Invited Speaker 3: Professor Kaoru Sumi (Future University Hakodate, Japan)

Title:IS-3 Affective Interactive Systems Prof. Kaoru Sumi

Kaoru Sumi is **a professor** in the Department of Media Architecture, Future University Hakodate, Japan. Prof. Sumi received her Ph.D. in engineering from the University of Tokyo.

She is currently working on the following research.

kaoru.sumi@fun.ac.jp

・Affective Computing
・Digital storytelling
・Evaluation and control of video / animation / game effect
・Persuasion technology using character agents
・Serious games

She previously worked at ATR MI&C Research Laboratories, Communications Research Laboratory, and Osaka University, where she researched human-computer interaction, knowledge engineering, and the application of artificial intelligence. After Prof. Sumi worked on media informatics and human-agent interaction at the National Institute of Information and Communications Technology (NICT), she was an associate professor at Hitotsubashi University.

Abstract

In this talk, I will present the effect of using emotions in humans and artifacts (computer systems, virtual agents, robots, etc.) interaction. As known as Media Equation, the relationship between humans and artifacts is similar to the social relationship between humans and humans. For example, when a human is helped by an artifact a human want to thank artifacts and return something. Like humans, it is important for artifacts to recognize emotions and express emotions in relation between humans and artifacts. In this talk, I introduce a technique to

recognize and express emotions in human interaction with artifacts and show examples of how effective artifacts are when using emotions.