

# **Social AI for Human Consensus Formation**

**Tokuro Matsuo, Ph.D.**

**Professor, School of Medicine, Fujita Health University, Japan**

## **Abstract**

Nowadays, a lot of types of AI system to make effective activities among people, organization, and society are provided. However, the underlying technologies of artificial intelligence are not easily applied to real-world systems. This is because there are numerous variables involved, and we have not only failed to organize them but also failed to grasp their true nature. In this lecture, we will focus on the practical applications of artificial intelligence in specific research phases and its utilization in society. In the next decade, we can forecast a lot of types of consensus formation systems are provided and we may find new communication systems integrating between cyber and physical environment. In this talk, I introduce our conducted experiments using cyber-physical discussion environment in the panel discussion session in the conference. In the session, facilitator asks question to panelists about issues on the discussion and attendees can also do as well by their voice. Each attendee also can post and declare his/her opinions and suggestions through the online discussion system during the session. One or two facilitators facilitate the discussion in the online system as well as real discussion. We found out a lot of interesting results of surveys from attendees taken in before/after the experiments. I also introduce the environment to provide useful information for attendees by the digital signage system in the conference venue. This digital signage system is connected to the attendee's location capture system and conference registration system. These integrations between cyber and physical environments and data enable to make better consensus formation between all sorts of people.

## **Biography**

Dr. Tokuro Matsuo is currently Professor at School of Medicine, Fujita Health University, Japan. Also, he is currently Visiting Professor at Sam Houston State University, USA; Executive Director of International Institute of Applied Informatics (IIAI); Executive Director of International Accreditation Association for Higher Education; Guest Professor at Bina Nusantara University, Indonesia; Japan MICE Ambassador; and Kumamoto City MICE Ambassador. He was Professor at Advanced Institute of Industrial Technology (AIIT) in Tokyo Public University Corporation, Japan and Director of Research Center for Artificial Intelligence and Service Science at AIIT (2012-2026); Associate Professor at Yamagata University, Japan (2006-2012); Adjunct Professor at Asian University, Taiwan (2019-2021); Invited Professor at City University of Macau, Macau (2018-2020); Visiting Researcher at University of Nevada, Las Vegas, USA (2016-2017); Vice-President, International Association for Computer and Information Science, USA (2015-2017); Vice-President, Software Engineering Research Foundation, USA (2013-2018); Visiting Researcher at University of California at Irvine, USA (2010-2011); Research Fellow at Shanghai University, China (2010-2013); and Project Professor of Green Computing Research Center at Nagoya Institute of Technology, Japan (2011-2014); Guest Professor at Nagoya Institute of Technology, Japan (2021-2023); and Research Fellow of SEITI in Central Michigan University, USA (2010-2018). He received his Ph.D. in computer science from Nagoya Institute of Technology in 2006. His current research interests include agent-based electronic commerce, qualitative reasoning and simulation, material informatics, IT and business management, and IoT. Also, he is a professional event planner and event producer. He delivered over 250 keynotes and invited talk at international conferences, symposia, and seminars. He also received over 10 awards on research and over 30 research grants from government, research foundations, and company. He has ever presented over 300 reviewed papers in journals and in international conference including top/high-ranked international journals and conferences, such as, SN Applied Sciences, Data in Brief, Marine Systems & Ocean Technology, International Journal of Neural Systems, International Journal of Business Information Systems, Logic Journal of IGPL, IEEE Access, Heliyon, Applied Artificial Intelligence, Emerging Science Journal, AAAI, IEEE CEC, AAMAS, IEEE WCCI, and WWW. Also, he has published 14 edited books from Springer, IGI-Global, and WIT Press. He has been over 90 international conference organizing chairs (conference chair/ program chair / finance chair / publication chair) of IEEE PRIWEC(2006), IEEE/ACIS SNPD (2009 2012, 2013, 2014, 2015, 2017, 2018, 2019), PRIMA (2009, 2020, 2024, 2026), PRICAI (2024), IEEE/ACIS ICIS (2010, 2013, 2015, 2016), IIAI AAI (2012-2026), AAMAS (2013), IEEE/ACIS SERA (2014, 2015), IEEE SOCA (2014, 2017), IEEE TENSYP (2016), IEEE International Conference on Agentic AI (2016, 2017, 2023, 2026), IEEE SC2 (2017), ASEAN-AI (2018), and other 50 international conferences and workshops.