# Towards a soft landing for a smart social credit system

#### January 3<sup>rd</sup>, 2023, 1pm – 4pm

Hyatt Regency Maui, Hawai'i + online by Zoom (ID: 871 6461 4368, PW: 201153)

https://us06web.zoom.us/j/87164614368?pwd=c2R1d0pBNUtRRmo1TDFQZEwzcDRGUT09

## Organizer

Isamu Okada, Soka University, Japan Fujio Toriumi, The University of Tokyo, Japan

## Program

- 1:00 1:25 Opening Talk: Fujio TORIUMI, The University of Tokyo Toward the Healthy Information Platform
- 1:25 1:50 Keynote Talk: Isamu OKADA, Soka University Towards a soft landing for a smart social credit system
- 1:50 2:20 Invited Talk: Tadahiko MURATA, Kansai University Real-Scale Social Simulations Using Synthetic Societal Data
- 2:20 2:40 Coffee Break
- 2:40 3:00 General Talk: Eizo AKIYAMA, Univeristy of Tsukuba Multilevel selection of punishment, reward and praise
- 3:00 3:20 General Talk: Hitoshi YAMAMOTO, Rissho Univeristy Which decision is more acceptable, AI or human: An analysis using indirect reciprocal situations.
- 3:20 3:45 Invited Talk: Takao TERANO, Chiba University of Commerce Amalgamating Agent and Gaming Simulation to Understand Implicit Latent Customer Experience
- 3:45 4:00 Free Discussion: Coordinated by Isamu OKADA, Soka University Towards a soft landing for a smart social credit system

#### Abstract

#### **Real-Scale Social Simulations Using Synthetic Societal Data**

Tadahiko MURATA Kansai University

In this talk, we introduce the current situation of synthesized societal data to support real-scale social simulations for real-scale social simulations (RSSS). In order to conduct RSSSs that are simulations for specific geographical areas or regions, the data relating to the specific regions are required. Although information on the land or buildings are prepared by GIS (Geographical Information Systems), it is difficult to utilize the information on residents such as age, sex, occupation, income due to privacy reasons.

We have already synthesized such data called synthetic populations for Whole Japan without using any privacy data but only using the publicly released statistics. We synthesize multiple sets of synthetic populations so that any third party recognizes whether a true information on a specific household is included or not.

Since synthetic populations currently include household information on their living places such as so-called night-time population distributions, we have estimated workplaces for workers in households to estimate relations between night-time distributions and daytime distributions. This estimation enables us to estimate activity data for each household member such as time schedule for their everyday lives and possible places during their off-duty hours. We define such information with their activity data as "Synthetic Societal Data (SSD)". SSD can be described as follows: SSD = Synthetic Populations + Basic Behavioral Data

We show some examples and possibilities of RSSSs using SSD in the talk.

# Amalgamating Agent and Gaming Simulation to Understand Implicit Latent Customer Experience

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Agent-Simulation is a tool to make unclear future scenarios visible in various business decisions. Gaming-Simulation is often used as a language to communicate among business players with computational aids to discuss the future unclear complex situations. For these years, we are conducting several research projects to amalgamate Agent-Simulation and Gaming-Simulation in business decision-making problems. One of the most unique aspects of our work is that we adopt a human-in-the-loop participatory approach in our projects. Agent simulation, with both computer and human agents, is often used to design and analyze complex business problems. In addition, game simulation, used primarily by human players, is extended to computer agent players in design thinking. This approach requires the development of new formal methods for describing and analyzing scenarios derived from results of agent and/or gaming simulations. These methods will contribute to future social credit systems.