

eKNOW 2021

The Thirteenth International Conference on Information, Process, and Knowledge Management

July 18 – 22, 2021

Nice, France

eKNOW 2021 Editors

Takao Terano, Chiba University of Commerce, Japan Susan Gauch, University of Arkansas, USA

Printed from e-media with permission by:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2021) by International Academy, Research, and Industry Association (IARIA) Please refer to the Copyright Information page.

Printed with permission by Curran Associates, Inc. (2023)

International Academy, Research, and Industry Association (IARIA) 412 Derby Way Wilmington, DE 19810

Phone: (408) 893-6407 Fax: (408) 527-6351

petre@iaria.org

Additional copies of this publication are available from:

Curran Associates, Inc. 57 Morehouse Lane Red Hook, NY 12571 USA Phone: 845-758-0400

Fax: 845-758-2633

Email: curran@proceedings.com Web: www.proceedings.com

Table of Contents

Myoko Model for Balancing Infectious Disease Control and Local Economy Hideyuki Nagai and Setsuya Kurahashi	1
An Agent-based Model in Activity-Driven Network of COVID-19 Epidemic Using Mobility and Infection Data in Tokyo 2020 Kazumoto Takayanagi and Setsuya Kurahashi	8
The Shin-Life Career Game: Pursuing Your New Life Style through Gaming Simulation Akinobu Sakata, Takamasa Kikuchi, Ryuichi Okumura, Masaaki Kunigami, Atsushi Yoshikawa, Masayuki Yamamura, and Takao Terano	14
A Knowledge Extraction from Epidemic Control Simulation Masaaki Kunigami, Takamasa Kikuchi, and Takao Terano	21
Survey and Application: Constructing Life Planning Support System for Retirement Planning Using Social Simulation Takamasa Kikuchi and Hiroshi Takahashi	27
Supporting Augmented Reality Industry 4.0 Processes with Context-aware Processing and Situational Knowledge Gregor Grambow, Daniel Hieber, Roy Oberhauser, and Camil Pogolski	29
Generating Market Comments on Stock Price Fluctuations Using Neural Networks Ibuki Sekino and Minoru Sasaki	37
Predicting the Approval or Disapproval of each Faction in a Local Assembly Using a Rule-based Approach Ryo Kato and Minoru Sasaki	42
Japanese Word Sense Disambiguation Using Gloss Information of a Japanese Dictionary Hiroki Okemoto and Minoru Sasaki	47
Extraction of Causal Relationships across Multiple Sentences from Securities Reports Takerou Aniya and Minoru Sasaki	51
Optimizing Statistical Distance Measures in Multivariate SVM for Sentiment Quantification Kevin Labille and Susan Gauch	57
Detecting Fake News Through Emotion Analysis Andrew Mackey, Susan Gauch, and Kevin Labille	65
Usage of Blockchain Technology for the Improvement of Industry and The Training of Future Talents Fadhila Djouggane, Samia Aitouche, Karima Aksa, and Hanane Zermane	72