Editorial

Special Collection of Extended Selected Papers on "Novel Research Results Presented at the 14th International Joint Conference on Knowledge-based Software Engineering (JCKBSE2022), 22–24 August 2022, Larnaca, Cyprus https://easyconferences.eu/jckbse2022/"

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The Intelligent Decision Technologies Journal, IOS Press is devoting the special collection at hand to *Novel Research Results presented at the 14th International Joint Conference on Knowledge-based Software Engineering (JCKBSE2022)*. JCKBSE is a well-established international biennial conference that focuses on the applications of Artificial Intelligence on Software Engineering. The 14th International Joint Conference on Knowledge-based Software Engineering (JCKBSE2022) was organized by the Department of Informatics of the University of Piraeus, Greece. JCKBSE2022 was originally planned to take place in Larnaca, Cyprus. Unfortunately, the COVID-19 pandemic forced it to be rescheduled as an online conference.

In more detail, the special collection at hand consists of an editorial note and an additional five (5) papers. All papers were selected among the very top works submitted and accepted into JCKBSE2022 and their authors were invited to submit extended versions of their papers to the special collection. All papers in this collection were rigorously reviewed and revised according to the reviewers' comments and suggestions.

More specifically, the papers in the special collection are organized as follows:

The first paper, by Junichi Ichimura and Takako Nakatani, is on '*Pattern to Improve Reusability of Numerical Simulation: Object-Action Pattern*". The authors propose a meta-structure of a physical phenomenon as a pattern for efficient development of simulation systems and investigate its effectiveness by applying it to the simulation of an infectious disease.

The second paper, by Hironori Takeuchi, Kota Imazaki, Noriyoshi Kuno, Takuo Doi, and Yosuke Motohashi, is on "*Constructing Reusable Knowledge for Machine Learning Projects Based on Project Practices*". The authors focus on projects for the development of Machine Learning-based service systems in which Machine Learning techniques are applied to enterprise functions. They pro-

pose a method for collecting insights by referring to a development model based on project practices and developing patterns for Machine Learning projects as an enterprise architecture model.

The third paper, authored by Shuaicai Ren, Hiroyuki Nakagawa, and Tatsuhiro Tsuchiya, is on "*Goal Model Structuring Based on Semantic Correlation of User Reviews*". The authors propose a comprehensive user review clustering method, comprised of two components, namely a Latent Dirichlet Allocation (LDA) model which clusters user reviews into several topics and a distance-based clustering algorithm which is an improved version of the existing clustering method.

The fourth paper, by Shuichiro Yamamoto, is on "*Functional Aspect Resonance Matrices for Fraud Analysis*". The author proposes a new matrix representation for the Functional Resonance Analysis Method and shows its equivalence to existing matrix representations. The paper includes a case study of the proposed matrix representation to fraud incident analysis.

Finally, the fifth paper, by Shuichiro Yamamoto, is on "*Digital SDGs Framework towards Knowledge Integration*". The author proposes a solution to the question: "How do we combine knowledge for the Sustainable Development Goals and Digital Transformation".

It is the hope of the editors of the special collection that its readers, including professors, researchers, scientists, engineers and students in intelligence-related disciplines, will find it useful and inspiring in their works and researches. On the other hand, societal demand continues to pose challenging problems, which require ever more efficient tools, methodologies, systems and technologies to be devised to address them. Thus, the reader may expect that additional related works will appear in future issues of the Intelligent Decision Technologies journal.