

Lecture Notes in Artificial Intelligence

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New Frontiers in Artificial Intelligence

JSAI-isAI International Workshops, JURISIN,
AI-Biz, LENLS, Kansei-AI
Yokohama, Japan, November 10–12, 2019
Revised Selected Papers

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Preface

The Japanese Society for Artificial Intelligence (JSAI) is a premier academic society that focuses on artificial intelligence (AI) in Japan and was established in 1986. The JSAI International Symposium on Artificial Intelligence (JSAI-isAI 2019) was the 11th international symposium on AI supported by the JSAI. JSAI-isAI 2019 was successfully held during November 10–12 at Keio University in Yokohama, Japan. 113 people from 8 countries participated and 7 invited talks were presented. The JSAI-isAI 2019 included four workshops. 75 papers were submitted and 46 papers were selected for presentation at the workshops. This volume, *New Frontiers in Artificial Intelligence: JSAI-isAI 2019 Workshops*, is the post-proceedings of JSAI-isAI 2019. From the four workshops (JURISIN 2019, AI-Biz 2019, LENLS 16, and Kansei-AI 2019), 26 papers were carefully selected and revised according to the comments of the Workshop Program Committees. The acceptance rate was about 56%. This resulted in the excellent selection of papers that were representative of some of the topics of AI research both in Japan and in other parts of the world.

The 13th International Workshop on Juris-Informatics (JURISIN 2019) was held with the support of JSAI in association with JSAI International Symposia on AI (JSAI-isAI 2019). Juris-informatics was organized to discuss legal issues from the perspective of information science. Compared with the conventional AI and law, this workshop covered a wide range of topics, including any theories and technologies which are not directly related with juris-informatics but have a potential to contribute to this domain.

Artificial Intelligence of and for Business (AI-Biz 2019) was the 4th workshop hosted by the Business Informatics (SIG-BI) of JSAI and we believe the workshop was successful, because of very wide fields of business and AI technology, including for human capital, industry classifications, capturing mercurial customers, variable selection, organizational performance, traffic congestion, visualization of R&D project, credit risk, ecocars, stock price prediction, and so on.

Logic and Engineering of Natural Language Semantics (LENLS 16) was the 14th event in the series, and it focused on the formal and theoretical aspects of natural language. LENLS is an annual international workshop recognized internationally in the formal syntax-semantics-pragmatics community. It has been bringing together, for discussion and interdisciplinary communication, researchers working on formal theories of natural language syntax, semantics and pragmatics, (formal) philosophy, AI, and computational linguistics.

Kansei and Artificial Intelligence (Kansei-AI 2019) was the first international workshop on artificial affective (Kansei) intelligence. The scope of this workshop was research of science and engineering related to value judgements made through the five senses, such as image processing, tactile engineering, acoustics, machine learning, sensitivity engineering, and natural language processing.

It is our great pleasure to be able to share some highlights of these fascinating workshops in this volume. We hope this book will introduce readers to the state-of-the-art research outcomes of JSAI-isAI 2019, and motivate them to participate in future JSAI-isAI events.

July 2020

Maki Sakamoto
Naoaki Okazaki
Koji Mineshima
Ken Satoh

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