

Web Intelligence 2022 Conference Workshop Proposal

11th International Workshop on Intelligent Data Processing (IDP)

(1) Workshop Titles

Workshop Title: The 11th International Workshop on Intelligent Data Processing - special session

(2) Workshop Introduction

Improving data processing efficiency has attracted much attention from various research communities. Researchers in related fields are facing the challenges of data explosion, which demands enormous manpower for data processing. Artificial intelligence and intelligent systems offer efficient mechanisms that can significantly reduce the costs of processing large volume data and improve data processing quality. Practical applications have been developed in different areas including online education, virtual-reality-aid online teaching, health informatics, online data analysis, etc. Proposed length of the workshop: Half-day.

(3) Workshop Motivation & Details

This workshop aims to gather experts and scholars from related fields to present and share their recent research on intelligent data processing. The purpose of the 11th IDP is to provide a forum for discussion and interaction among researchers with interests in the cutting-edge techniques of intelligent data processing. A special attention is given to the topics that developed in the COVID-19 period such as online education, educational data mining, social networks, and health informatics. Participants are invited to submit papers in all areas of data- and knowledge-based approaches. Research topics of interest include, but are not limited to:

- Artificial Intelligence
- Big Data Analysis
- Brain Informatics and its applications
- Cloud Computing

- Cloud-based Health Informatics
- Data Mining & Machine Learning
- Knowledge Representation and Reasoning
- Online Data Analysis
- Optimisation Algorithms
- Virtual reality for teaching
- Online Social Behavior in Education Sector
- Online Education Model amid COVID-19
- Online Social Media and Public Opinion

(4) Past IDP Workshops

Previous Workshop are listed as below:

- IDP 2012 was held in Kunming, China in conjunction with APWeb2012. IDP 2012 attracted 21 submissions from Japan, Korea, Hong Kong, Taiwan, China, and India with a 33.3% acceptance rate. Each paper was carefully reviewed by two or three members of an international Program Committee (PC). Seven papers were selected to be included in this volume.
- IDP 2013 was held at NIT, Zhejiang University in Ningbo, China in conjunction with KSS2013 and Data Science Forum. IDP 2013 attracted 15 submissions from Australia, China and Hong Kong with a 40% acceptance rate. Each paper was carefully reviewed by two or three members of an international Program Committee (PC). Six papers were selected to be included in this volume.
- IDP 2014 was held at Chinese Academy of Sciences in Shen Zhen, China in conjunction with ICDM 2014. ICDM IDP14 attracted 19 submissions from Australia, China, Saudi Arabia, United States and Hong Kong 5 countries and regions with 26.3% acceptance rate for regular papers.
- IDP2015 was held in Hangzhou, China in conjunction with 12th Beijing-Shanghai-Hangzhou High-tech Industrialize Cooperation Forum. Invited speakers including the Academician of Chinese Academy of Sciences.
- IDP2016 was held at Tongji University, China in conjunction with 9th IEEE/ACM International Conference on Utility and Cloud Computing (UCC). Seven papers were selected to be included in the proceeding.

**The 21st IEEE/WIC/ACM International Conference on
Web Intelligence and Intelligent Agent Technology**
17–20 November 2022 | Niagara Falls, Canada
A Hybrid Conference with both Online and Offline Modes

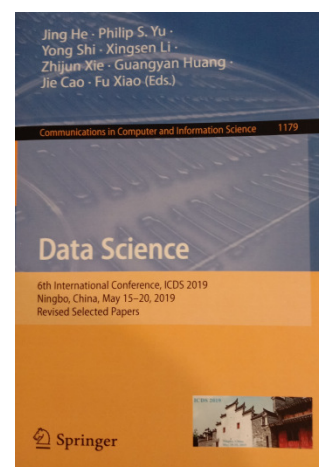
- IDP2017 was held in Hong Kong, China in conjunction with The 13th International Conference on Computational Intelligence and Security.
- IDP2018 was held in USA in conjunction with First IEEE International Conference on Artificial Intelligence and Knowledge Engineering (AIKE). Five papers were selected to be included in the proceeding.
- IDP2019 was held in Ningbo, China in conjunction with 6th International Conference on Data Science (ICDS). Five papers were selected to be included in the proceeding.
- IDP2020 was held in Melbourne, Australia in conjunction with The 2020 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20). Sixteen papers were selected to be included in the proceedings.
- IDP2021 was held in Melbourne, Australia in conjunction with The 2021 IEEE/WIC/ACM International Joint Conference on Web Intelligence and Intelligent Agent Technology (WI-IAT'20). Eight papers were selected to be included in the proceedings.



**2018 IEEE First International
Conference on Artificial
Intelligence and Knowledge
Engineering (AIKE)
AIKE 2018**

Table of Contents

Message from the AIKE 2018 General Co-Chairs	vi
Message from the AIKE 2018 Program Co-Chairs	vii
AIKE 2018 Organizing Committee	ix
AIKE 2018 Program Committee	xv
Regular Papers	
Translating Natural Language to Code: An Unsupervised Ontology-Based Approach	1
Maria Kozou (University of Cyprus) and Maroula Adam (University of Cyprus)	
Assessing Online Customer Quality Using a Multiscale Perceptron	9
Shuang Ni (University of Toronto) and Dabobuh Faki (Ryerson University Toronto)	
Biomarker Detection from RfH-Based Complete Functional Connectivity Networks	17
Shah Mehmood Hameed (Georgia State University), Benqin Aydin (Georgia State University), Soukaina Fikri Bouabraham (Georgia State University), Nafiseh Kogal (Georgia State University), Gao Geyang (Klantechnology (Georgia State University) and Robin Moran (Georgia State University)	
Evolutionary Heuristic A* Search: Heuristic Function Optimization via Genetic Algorithm	25
Ying-Rong Yu (Texas A&M University), Jing Du (Texas A&M University), and Rishi Manjapala (Texas A&M University)	
Adaptive Structural Learning of Deep Belief Networks for Medical Examination Data and Its Knowledge Extraction by Wang C.S.	33
Shou-Bin Shieh (Hsinchu City University), Tzong-Shyan Pheng (National University of Hsinchu), and Tzong-Hong Horng (National University of Hsinchu)	



(5) Tentative technical program committee

Jiming Liu, Hong Kong Baptist University, Hong Kong, China

Takehito Utsuro, University of Tsukuba, Japan

Min Yao, Zhejiang University, China

Yiu-ming Cheung, Hong Kong Baptist University, Hong Kong, China

Jing He, Swinburne University, Australia

David Taniar, Monash University, Australia

Kristen (Yuanxi), Li, Hong Kong Baptist University, Hong Kong, China

Clement Leung, Hong Kong Baptist University, Hong Kong, China

Huiming Tang, Zhejiang University, China

Yinming Li, Zhejiang University, China

Gansen Zhao, South China Normal University, China

Sanghyuk Lee, XJLU, China

(6) Workshop Organizers

- Paolo Mengoni, Hong Kong Baptist University, Hong Kong, China
- Kristen (Yuanxi), Li, Hong Kong Baptist University, Hong Kong, China
- Haolan, Zhang, SCDM Centre NIT, Zhejiang University, China,
haolan.zhang@nit.zju.edu.cn

(7) Workshop Schedules

- Submission deadline: 1 July 2022
- Acceptance deadline: 30th July 2022
- Camera ready: 7 August 2022
- Program ready: 17 November, 2022