

WI-IAT 2021 Workshop on Complex Methods for Data and Web Mining (CMDWM)

Introduction

New real world applications of data mining and machine learning have shown that popular methods may appear to be too simple and restrictive. Mining more complex, larger and generally speaking "more difficult" data sets pose new challenges for researchers and ask for novel and more complex approaches. We organize this workshop where we want to promote research and discussion on more complex and advanced methods for the particularly demanding data and web mining problems. Although we welcome submissions concerning methods based on different principles, we would like also to see among them new research on using optimization techniques. The new data and web mining problems are definitely more complex than traditional ones and they could result in more difficult non-convex optimization formulations. We would like to focus interest of data mining community on various challenging issues which come up while using complex methods to deal with the difficult data mining problems.

Topics of Interest

Suggested topics include (but are not limited to) the following:

- Optimization methods for data or web mining and machine learning
- Multiple criteria perspectives in data mining and learning
- Supporting human evaluation of patterns discovered from data
- Combined classifiers for complex learning problems
- New methods for constructing and evaluating on-line recommendation
- Mining "difficult" data concerning different aspects of data difficulty (time changing, class imbalanced, partially labeled, multimedia, semi-structured or graph data)
- Mining spatial data and images
- Identifying the most challenging applications and key industry drivers (where both theories and applications point of views have to meet together)

Workshop Organizers

Chinese Academy of Sciences Research Center on Fictitious Economy & Data Science Key Laboratory of Big Data Mining and Knowledge Management and also with Research Center on Fictitious Economy & Data Science

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Important Dates:

Submission deadline: 20th July, 2021 Acceptance deadline: 20th September, 2020

Submission Instructions:

CMDWM invites original high-quality papers. Each accepted paper will be allocated 4 pages in the proceedings and all papers accepted for workshops will be included in the Workshop Proceedings published by the IEEE Computer Society Press, and will be available at the workshops.

Program Committee:

Xiaojun Chen, The Hong Kong Polytechnic University, HK, China Zhengxin Chen, University of Nebraska at Omaha, USA Kun Guo, University of the Chinese Academy of Sciences, China Jing He, Victoria University, Australia Gang Kou, University of Electronic Science and Technology of China, China Kin Keung Lai, City University of Hong Kong, Hong Kong, China Heeseok Lee, Korea Advanced Institute Science and Technology, Korea Jiming Peng, University of Illinois at Urbana-Champaign, USA Yi Peng, University of Electronic Science and Technology of China, China Zhiquan Qi, University of the Chinese Academy of Sciences, China Yingjie Tian, Chinese Academy of Sciences Research Center on Fictitious Economy & Data Science, China Bo Wang, University of Internal Business and Economics, China Jianping Li, Chinese Academy of Sciences, China Lingling Zhang, University of Chinese Academy of Sciences, China Yanchun Zhang, Victoria University, Australia Ning Zhong, Maebashi Institute of Technology, Japan Xiaofei Zhou, Chinese Academy of Sciences, China Yang Xiao, University of Chinese Academy of Sciences, China Pei Quan, University of Chinese Academy of Sciences, China Yi Qu, University of Chinese Academy of Sciences, China Minglong Lei, Beijing University of Technology, Beijing, China.