



BRIEF DESCRIPTION:

Three-way decision, as an uncertain decision methodology, has received a wide attention in the research fields of data-driven decision-making, granular computing and approximate reasoning, since it was proposed by Professor Yiyu Yao. Three-way decision is closely related to granular computing, and they are viewed as uncertain and unstructured problem solving methods to simulate the human thinking for complexity problem solving. As a branch of three-way decision, sequential three-way decision is a special three-way decision model for dynamic decisions based on appropriate available information granules and their interpretation. In the case that available information is insufficient, or the evidence is not definitely sufficient to support an acceptance or a rejection at a particular level of granularity, a third option of non-commitment is an alternative choice to defer a decision to the next level of granularity. This cognitive decision-making process constructs a coarse-to-fine grained structure, thus forms a sequential decision-making method, namely a sequential three-way decision. The methodology of sequential three-way decisions can be extended to many related research fields, especially in active machine learning, deep learning, clustering analysis, semi-supervised learning, recommender systems, pattern recognition, multi-label and multi-instances learning, sequential learning. This workshop aims to bring together researchers and practitioners from academia and industry interested in addressing theoretical as well as application issues of Sequential Three-Way Decision and Machine Learning.

TOPICS (OPEN LIST)

- Sequential three-way decision
- Active three-way decision
- Dynamic three-way decision
- Machine learning for three-way decision
- Deep learning and three-way decision
- Sequential three-way decision and active learning
- Three-way recommender systems
- Three-way decision and dynamic clustering analysis
- Multi-label learning and three-way decision
- Multi-instance learning and three-way decision
- Multi-class three-way decision and machine learning
- Three-way decision and dynamic sparse learning

PAPER SUBMISSION

All the submitted papers will be thoroughly reviewed on the basis of indicators such as technical quality, relevance, presentation, significance, and clarity. Each paper should not be more than 12 pages long in the Springer-Verlag LNCS style, including figures, tables and references. The LNCS template may be downloaded from the link:

<http://www.springer.com/lncs>.

The submitted papers must be in PDF format and needs to be submitted electronically using EasyChair link <https://easychair.org/conferences/?conf=ccgt20>.

The authors of accepted abstracts are supposed to give the full-length talk at the workshop. It will encourage all research work related to the topic of Sequential Three-Way Decision and Machine Learning.

IMPORTANT DATES

Full paper submission due	April 15, 2020
Notification to authors	May 31, 2020
Camera ready submission due	June 30, 2020
Conference dates	Oct 23-25, 2020

ORGANIZING CHAIRS

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We look forward to meeting with you in Shanghai, China!