

**Title :**

Artificial Intelligence for Meteorology Applications

Abstract:

The Artificial Intelligence (AI) is playing a more and more essential role in the industrial revolution and we are seeking a lot of evolution in various machine learning methodologies. Forecast of meteorological disasters is an important and challenging worldwide problem. Various techniques have been used to solve it, but the accuracy of them is not high due to the highly nonlinear, random, and complex nature of precipitation. In recent years, with the rapid development of artificial intelligence technology, it has gradually penetrated into all aspects of people's lives, and the meteorological field are no exception.

The workshop aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Applications of Meteorology based on Artificial Intelligence. It also provides a premier interdisciplinary platform for researchers, practitioners and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Applications of Meteorology. To this end, increasing number of researchers and engineers are already or are to be involved the AI field. Therefore, the topic of AI and its applications is an interesting workshop title to be associated with the ICAIS 2022. The organizing committee is excited to invite you to take part in this workshop.

Scope and Topics:

We encourage researchers contribute to and help shape the conference through submissions of their research abstracts, and papers. Also, high quality research contributions describing original and unpublished results of conceptual, constructive, empirical, experimental, or theoretical work in all areas of Applications of Meteorology based on artificial intelligence are cordially invited for presentation at the conference. We are soliciting original contributions that address a wide range of theoretical and practical issues including, but not limited to:

- ✧ Artificial Intelligence Applied in the Atmospheric Science
- ✧ Using artificial intelligence to better predict severe weather
- ✧ Machine Learning in Weather Forecasting
- ✧ Meteorological Satellite Studies
- ✧ Observation networks and weather forecasting
- ✧ Forecasting different types of convective weather
- ✧ Applications of meteorology
- ✧ Agricultural meteorology
- ✧ Hydrometeorology
- ✧ Maritime meteorology



- ✧ Military meteorology
- ✧ Environmental meteorology
- ✧ Renewable energy
- ✧ The artificial intelligence applications in the other emerging engineering fields

Program Committee Chairs:

Wei Fang, Nanjing University of Information Science & Technology, China

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Wei Fang received his PhD in computer science from School of Computer Science and Engineering, Soochow University, China, in 2009. He is currently an associate professor in School of Computer and Software, Nanjing University of Information Science and Technology, China. He was a visiting scholar of Faculty of Computer Science, University of Florida, USA, from September 2015 to September 2016. His research interests include big data mining, deep learning and cloud computing. He is a member of CCF and ACM.

Nan Wang, Shaanxi Provincial Meteorological Observatory

Nan Wang is the chief forecaster and senior engineer of Shaanxi Meteorological Bureau and Shaanxi Provincial Meteorological Observatory. She is a member of major weather warning group and leader of short-term forecast. She has successively presided over and participated in more than 10 scientific research projects, such as the construction project of China Meteorological Administration, the special project of forecaster of China Meteorological Administration, the natural fund project of Shaanxi Provincial Science and Technology Department, and the key project of Shaanxi Meteorological Bureau. She has written more than 20 scientific research papers and published 7 academic papers, providing rich theoretical data support for the development and development of Shaanxi meteorological scientific research.

Program Committee:

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