



## **Title:**

Machine Learning, Pattern Recognition and Their Applications

## **Abstract:**

With the emergence of big data and advancing of computing services, artificial intelligence (AI) has attracted increasing attention around the world. The role of AI is becoming more important with our daily life, such as machine learning, pattern recognition, computer vision, data mining, human-machine interface, information retrieval and natural language processing, etc. To this end, increasing number of researchers and engineers are already or are to be involved the AI field. Therefore, the topic of machine learning, pattern recognition and their applications in AI is an interesting workshop title to be associated with the ICAIS 2021.

## **Scope and Topics:**

Potential topics include but are not limited to:

- ✧ Machine learning
- ✧ Pattern recognition
- ✧ Computer vision
- ✧ Data mining
- ✧ Image Processing
- ✧ Evolutionary computation
- ✧ Enforcement learning
- ✧ Deep learning
- ✧ Natural language processing
- ✧ Neural networks
- ✧ Artificial intelligence in medicine
- ✧ Medical image analysis
- ✧ Information retrieval
- ✧ Text recognition
- ✧ Modeling and optimization
- ✧ Ubiquitous computing
- ✧ Brain-like computing
- ✧ Biometrics

## **Program Committee Chairs:**

1. Prof. **Liangxiu Han** (Manchester Metropolitan University, UK)  
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**Bio:** Liangxiu Han is currently a full Professor at the school of Computing, Mathematics and Digital Technology, Manchester Metropolitan University, UK. Her research areas mainly lie in the development of novel big data analytics and development of novel intelligent architectures that facilitates big data analytics (e.g., parallel and distributed computing, Cloud/Service-oriented computing/data intensive computing) as well as applications in different domains (e.g. Health, Precision Agriculture, Smart Cities, Cyber Security, Energy, etc.) using various datasets such as images, sensor data, network traffic, web pages. As a Principal Investigator (PI) or Co-PI, Prof. Han has been conducting research in relation to big data processing and data mining, parallel and distributed computing/cloud computing (funded by EPSRC, BBSRC, Innovate UK, Horizon 2020, British Council, Royal Society, Industry, Charity, etc.). Prof. Han has also served as a guest editor for a number of reputable international journals and a chair (or Co-Chair) for organization of a number of international conferences/workshops in the field.

2. Prof. **Delong Shang** (Newcastle University, UK)

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**Bio:** Delong Shang is currently a full professor at Newcastle University, UK. He received his BS, ME and PhD degrees all in computer science from Nanjing University, Chinese Academy of Sciences and Newcastle University, respectively. His main research interest covers artificial intelligence brain-like chip design, computer architecture, asynchronous systems, artificial intelligence, etc. He has led the European flagship project "Human Brain Project", the Britain EPSRC key project, the National Eighth Five-Year Science and Technology Project, the National Seventh Five-Year Science and Technology Project. He was the recipient of the first prize for scientific and technological progress of the Chinese Academy of Sciences, China, the American PCM&MCM Technology Leading Digital First Prize, the University Invention and Innovation Award, etc. He has authored more than 100 peer-reviewed scientific papers.

3. Associate Prof. **Qing Tian** (Nanjing University of Information Science and Technology, China)

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**Bio:** Qing Tian is currently an Associate Professor at Nanjing University of Information Science and Technology, China. He obtained his Ph.D. degree from Nanjing University of Aeronautics and Astronautics, in 2016. He was an Academic Visitor at the University of Manchester from Feb 2018 to Feb 2019. He is the first recipient of several academic awards, such as the ICPR Best Scientific Paper Award, the Jiangsu Province excellent PhD dissertation award, the National PhD scholarships, etc. He also served as a program committee member for prestigious conferences, such as IJCAI, PRICAI, IDEAL, ISKE, CCML, CCF AI, etc. Besides, he has been serving as a reviewer for renowned journals or conferences, such as IEEE TPAMI, TNNLS, TCYB, TIFS, ACM TIST, Neural Networks, Information Sciences, Pattern



Recognition Letters, IJCAI, AAAI, ICDM, PRICAI, etc. His research interests include machine learning and pattern recognition.

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