

# Call for Papers

## The First International Workshop on Deep Learning-based Mobile Sensing (DeepSensing 2022)

in conjunction with the 15th IEEE International Conference on Internet of Things (iThings 2022)

August 22 - 25, 2022, Espoo, Finland

### Summary

The advent of sensor-rich smart devices (e.g., smartphones, smart watches, smart glasses) has enabled plenty of mobile sensing applications and services, such as indoor positioning and navigation, activity recognition, context recognition, invasion detection. Recently, deep learning has become very popular in AI-related tasks like speech recognition, computer vision, and natural language processing. However, deep learning-based mobile sensing is still in its infancy and many research issues remain unsolved. The goal of this workshop is to promote community-wide discussion on the theories, methods, and applications of deep learning-based mobile sensing.

### Call for Papers

This workshop solicits submissions from areas related to mobile sensing and deep learning. The interested topics include but not limited to:

- Concepts, theory, and models for mobile sensing systems
- Deep learning algorithms or models for mobile sensing
- Deep learning-based indoor positioning and navigation
- Deep learning-based activity recognition
- Deep learning-based invasion detection
- Deep learning for location-based services
- Machine learning-based mobile sensing

Submission link: <https://edas.info/newPaper.php?c=29460&track=111823>

### Important Dates

Paper Submission Deadline: May 7<sup>th</sup>, 2022

Authors Notification: June 10<sup>th</sup>, 2022

Final Manuscript Due: June 25<sup>th</sup>, 2022

Conference Date: August 22<sup>th</sup>-25<sup>th</sup>, 2022

### Submission

Author Instructions

All papers need to be submitted electronically through the EDAS website

(<https://edas.info/newPaper.php?c=29460&track=111823>) with PDF format. Submitted papers must not substantially overlap with papers that have been published or that are simultaneously submitted to a journal or a conference with proceedings. Papers must be clearly presented in English, must not exceed 6 pages in IEEE Computer Society proceedings format (or up to 8 pages with the pages over length charge), including tables, figures, references and appendices. The limit length of accepted papers should be 6 pages with at most 2 extra page charge.

Papers will be selected based on their originality, significance, relevance, soundness of technology, and clarity of presentation assessed by at least three reviewers. All submitted papers will be judged through single-blind reviews.

Submission of a paper should be regarded as a commitment that, should the paper be accepted, at least one of the authors will register and attend the conference to present the work. IEEE iThings 2022 reserves the right to exclude a paper from distribution after the conference (e.g., removal from the digital library and indexing services), if the paper is not presented at the conference. The selected excellent papers will be recommended to the following ISI journals for publication after extension.

- IEEE Internet of Things Journal
- Information Fusion (Elsevier)
- Satellite Navigation
- IEEE Transactions on Intelligent Vehicle

## **Organization Committee**

### **Technical Program Committee Chair**

Fuqiang Gu, Chongqing University, China

Chihua Chen, Fuzhou University, China

Fangwen Yu, Tsinghua University, China

### **Keynote Speakers**

Shahrokh Valaee, IEEE Fellow, University of Toronto, Canada

### **Technical Program Committee Members**

Chengming Jin, Nanyang Technological University, Singapore

Milad Ramezani, Oxford University, United Kingdom

Xuke Hu, DLR-German Aerospace Center, Germany

Chuang Yang, National University of Singapore, Singapore

Debaditya Acharya, CSIRO, Australia

Zhao Huang, Queen Mary University of London, United Kingdom

Zhiyong Zhou, University of Zurich, Switzerland

Dan Shen, Sun Yat-sen University, China

Chunyang Yu, OPPO, China

Wei Ma, Chongqing Jiaotong University, China

Jinjin Yan, University of New South Wales, Australia

Jan Grottke, RWTH Aachen University, Germany