

Special Issue on  
**Application of Neural Network in Mobile  
Edge Computing**

CALL FOR PAPERS

The continued development of machine learning and deep learning has led to vast progress in the field of wireless communication and mobile edge computing (MEC). Recently, there has been a focus on how to apply deep learning to the fields of wireless communication and mobile edge computing, and advancements have been made in edge computing scenarios such as mobile devices, consumer devices, drones, and vehicles.

Implementing deep neural network (DNN) applications often requires powerful computing resources to process large amounts of data. In the mobile edge computing environment, edge devices have limited capacity and the DNN application further suffers from the issues of wireless connection, for example handovers and service outage. Without properly addressing these issues, the wider application of DNN in practice will be limited, and as such the effective deployment and efficient execution of DNN models in the mobile edge computing environment has become the focus of attention in academia and industry.

The aim of this Special Issue is to collate original research and review articles from academics and industry-related researchers in the fields of wireless communication, machine learning, and edge computing. Researchers from academia and practitioners from the industry are invited to submit their innovative research on technical challenges and recent results related to neural network edge computing. This Special Issue provides an opportunity to discuss and express views on the current trends, challenges, and state-of-the-art solutions addressing various problems in machine learning for edge computing.

Potential topics include but are not limited to the following:

- ▶ DNN compression in MEC
- ▶ Efficient pattern recognition in MEC
- ▶ Efficient image processing in MEC
- ▶ Algorithms, schemes, and techniques of DNN application in edge systems
- ▶ DNN acceleration in MEC
- ▶ DNN model partition
- ▶ DNN offloading and split learning

Authors can submit their manuscripts through the Manuscript Tracking System at <https://review.hindawi.com/submit?specialIssue=456555>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

**Lead Guest Editor**

Xin Ning, Chinese Academy of  
Sciences, Beijing, China  
*ningxin@semi.ac.cn*

**Guest Editors**

Weiwei Cai, Northern Arizona  
University, Flagstaff, USA  
*wc358@nau.edu*

Xiao Bai, Beihang University, Beijing,  
China  
*baixiao@buaa.edu.cn*

**Submission Deadline**

Friday, 28 January 2022

**Publication Date**

June 2022