Deep learning is a model with multi-level layer structure that uses the underlying output as input from the top. From down to above is a process of the unsupervised learning, which automatically learns useful features, and expresses the low-level features as advanced features and from top to bottom is supervised learning process that through the labeled data to the whole network parameter optimization and adjustment of the whole network which has the characteristics of better learning ability. Deep learning has been able to develop so rapidly in recent years mainly due to the following two reasons. (1) The application of massive tagged data mitigates the problem of training. In deep learning, the data is "engine", and Imagenet has millions of annotated data. (2) The rapid development of computer hardware provides a powerful computing power which makes it possible to train large-scale neural networks, such as high-performance GPU can integrate thousands of cores.

Deep learning models have been proven to be an efficient solution to the most complex engineering challenges. At the same time, human centered computing in fog and mobile edge networks is one of the serious concerns now-a-days. Therefore, it is expected that the development of deep learning based solutions will play an important role for human centered computing in fog and mobile edge networks. This special issue mainly focuses on deep learning models for human centered computing in fog and mobile edge networks, addressing both original algorithmic development and new applications of deep learning. We are soliciting original contributions, of leading researchers and practitioners from academia as well as industry, which address a wide range of theoretical and application issues in deep learning for human centered computing in fog and mobile edge networks.

**Topics of Interest**

The topics relevant to this special issue include but are not limited to:

- Deep learning for information revelation and privacy in human centered computing in fog and mobile edge networks
- Deep learning for industrial system in fog and mobile edge networks
- Deep learning for security protocols in human centered computing in fog and mobile edge networks
- Deep learning for fog and mobile edge network modelling and security issues
- Deep learning for security, privacy and management of multimedia data in fog and mobile edge networks
- Deep learning to gain novel insightson in human centered computing in fog and mobile edge networks
- Human centered computing and deep learning concepts and applications
- Deep learning algorithms for learning the behavior analysis in human centered computing in fog and mobile edge networks
Deep learning for dynamic processes in human centered computing in fog and mobile edge networks
Deep learning for multimedia data management in fog computing

Submission Guidelines:

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Prospective authors should strictly follow the author guideline from: http://www.springer.com/engineering/computational+intelligence+and+complexity/journal/12652 for the preparation of submissions. Submitted papers will go through a strict peer review procedure. A separate cover letter, that provides a clear summary of authors and the article, is required when making the submission. All the authors need to submit their manuscript in https://www.editorialmanager.com/aihc/, clicking on "Submit a manuscript". Here you will find the label "Deep Learning for Fog and Mobile Edge Networks" then you can upload all of your manuscript files following the instructions given on the screen.

Important Dates

- **Manuscripts Due:** December 01, 2017
- **First Decision Date:** March 15, 2018
- **Revision Due:** May 15, 2018
- **Final Decision Date:** June 30, 2018
- **Final Paper Due:** July 30, 2018

Guest Editors

Dr. B. B. Gupta, National Institute of Technology, Kurukshetra, India (Corresponding Guest Editor)
Dr. Dharma P. Agrawal, University of Cincinnati, Cincinnati, USA
Dr. Shingo Yamaguchi, Yamaguchi University, Japan
Dr. Chang Choi, Chosun University, Republic of Korea