



Multi-Agent Deep Reinforcement Learning for Distributed Operation and Control of Microgrids

Guest Editors:

Dr. Van-Hai Bui

Department of Electrical
Engineering, School of
Engineering, State University of
New York (SUNY), Maritime
College, 6 Pennyfield Avenue,
Throggs Neck, New York, NY
10465, USA

Dr. Akhtar Hussain

Department of Electrical and
Computer Engineering, University
of Alberta, Edmonton, AB T6G
2G2, Canada

Dr. Wencong Su

Department of Electrical and
Computer Engineering, University
of Michigan-Dearborn, 4901
Evergreen Rd., Dearborn, MI
48128, USA

Deadline for manuscript
submissions:
closed (30 June 2023)

Message from the Guest Editors

Recently, the applications of the multi-agent system and deep reinforcement learning have attracted much attention for developing the distributed operation and control frameworks as well as handling uncertainty factors. In this Special Issue, we are looking for novel methods, algorithms, and technologies using multi-agent deep reinforcement learning to enhance energy efficiency for distributed operation and control of microgrids. Topics of interest for publication include, but are not limited to:

- Applications of artificial intelligence in distributed operation and control of microgrids
- Decentralized, and distributed operation and control of microgrids
- Energy management systems for microgrids
- Integration of renewables and EVs in microgrids
- Multiagent systems for microgrids
- Operation and control strategies with distributed energy storage systems
- Peer-to-Peer energy trading in a microgrids
- Power quality enhanced operation of distributed microgrids
- Resilience enhancement through/for microgrids





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Gianluigi Ferrari

Department of Engineering and
Architecture, University of Parma,
Parco Area delle Scienze, 181/A,
43124 Parma, Italy

Message from the Editor-in-Chief

Future Internet is a fast-growing journal devoted to rapid publications of the latest results in the general areas of computer networking/communications and information systems, with a focus on the Internet of Things, big data and augmented intelligence, smart systems (in terms of technologies, architectures, and applications), network virtualization, edge/fog computing, and cybersecurity. Both theoretical and experimental papers are welcome. Every year, *Future Internet* also features Special Issues dedicated to specific topics within the journal's scope.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, ESCI (Web of Science), Ei Compendex, dblp, Inspec, and other databases.

Journal Rank: CiteScore - Q1 (*Computer Networks and Communications*)

Contact Us

Future Internet Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/futureinternet
futureinternet@mdpi.com
[X@FutureInternet6](https://twitter.com/FutureInternet6)