



Analog AI Circuits and Systems

Guest Editors:

Prof. Dr. Long Jin

School of Information Science
and Engineering, Lanzhou
University, Lanzhou 730000,
China

Dr. Xuefang Nie

School of Information
Engineering, East China
JiaoTong University, Nanchang
330000, China

Dr. Jiliang Zhang

Department of Electronic and
Electrical Engineering, The
University of Sheffield, Mappin
Street, Sheffield S1 4ET, UK

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Message from the Guest Editors

In the past few years, we have seen great resurgence of artificial intelligence (AI), thanks to the increase in computational resources. Although AI is maturing, it is still challenging to solve the gradient explosion problem caused by long sequence modeling in a neural network, further improve its calculation accuracy and reduce its computational complexity with data-driven applications. On the other hand, since the way we hear and see things is on a continuous wave, an analog circuit makes an electronic representation of our physical world. Analog circuits represent the key components of communications and other systems in widespread, growing commercial use. In recent years, implementing AI algorithms using analog circuits has attracted attention, although AI algorithms have traditionally been developed on graphics processing units (GPUs). This Special Issue invites fundamental and applied research work on all aspects of analog AI circuits and systems, including but not limited to the following topics:

- Artificial neural networks;
- Recurrent neural networks;
- Intelligent computing;
- Machine learning;
- Analog artificial intelligence circuits;
- Analog computing.





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Prof. Dr. Flavio Canavero

Department of Electronics and
Telecommunications,
Politecnico di Torino, 10129
Torino, Italy

Message from the Editor-in-Chief

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