

REGULAR PAPERS ISSUE

**1016 Training Spiking Neural Networks Using Lessons From Deep Learning**

By J. K. Eshraghian, M. Ward, E. O. Neftci, X. Wang, G. Lenz, G. Dwivedi, M. Bennamoun, D. S. Jeong, and W. D. Lu

**| CONTRIBUTED PAPER |** This article serves as a tutorial and perspective showing how to apply the lessons learned from several decades of research in deep learning, gradient descent, backpropagation, and neuroscience to biologically plausible spiking neural networks.

**1055 Deep Reinforcement Learning for Smart Grid Operations: Algorithms, Applications, and Prospects**

By Y. Li, C. Yu, M. Shahidehpour, T. Yang, Z. Zeng, and T. Chai

**| CONTRIBUTED PAPER |** This article provides a detailed and well-organized overview of deep reinforcement learning (DRL) methodologies, which encompasses fundamental concepts and theoretical DRL principles, as well as the most sophisticated DRL techniques applied to power system operations.

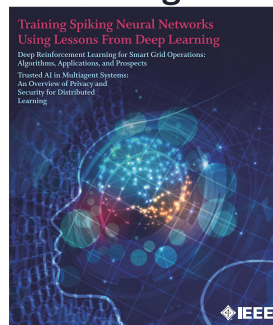
**1097 Trusted AI in Multiagent Systems: An Overview of Privacy and Security for Distributed Learning**

By C. Ma, J. Li, K. Wei, B. Liu, M. Ding, L. Yuan, Z. Han, and H. V. Poor

**| CONTRIBUTED PAPER |** This article provides an exhaustive overview of attacks and defensive mechanisms on privacy and security for distributed learning on four different levels, namely sharing data, sharing model, sharing knowledge, and sharing results.

**1014 SCANNING THE ISSUE**

**1133 FUTURE SPECIAL ISSUE/SPECIAL SECTIONS**



**On the Cover:**  
 This month's cover image highlights neural networks, which are inspired by the human brain, in a unique and captivating way.