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### **Topic: Deep Learning in Geoscience and Remote Sensing**

#### **Abstract:**

This talk presents and discusses recent progress in deep learning in the field of geoscience and remote sensing, an extending application field in the big-data and sensor-network era. Deep neural networks such as convolutional neural networks and auto-encoders are actively investigated for disaster prevention and damage estimation as well as environmental preservation and agricultural activities.

#### **Bio:**

Akira Hirose received the Ph.D. degree in electronic engineering from The University of Tokyo in 1991, where he is currently Professor with the Department of Electrical Engineering and Information Systems. The main fields of his research interests are wireless electronics and neural networks. He served as President of the Japanese Neural Network Society (JNNS) from 2013 to 2015, President of Asia-Pacific Neural Network Society (APNNS) in 2016, Vice President of the Institute of Electronics, Information and Communication Engineers (IEICE) Electronics Society from 2013 to 2015, Editor-in-Chief of the IEICE Transactions on Electronics from 2011 to 2012, Associate Editor of journals such as IEEE Transactions on Neural Networks from 2009 to 2011, IEEE Geoscience and Remote Sensing Newsletter from 2009 to 2012, as well as General Chair of Asia-Pacific Conference on Synthetic Aperture Radar (APSAR) 2013 Tsukuba, General Chair of International Conference on Neural Information Processing (ICONIP) 2016 Kyoto, and General Chair of International Geoscience and Remote Sensing Symposium (IGARSS) 2019 Yokohama. Dr. Hirose is a Fellow of the IEEE and the IEICE and a member of JNNS and APNNS.