Message from the Guest Editors

Dear Colleagues,

Synthetic aperture radar (SAR) technology is widely used in earth observations due to its illumination- and weather-independence capability. Tens of SAR satellites are orbiting Earth each day, with TB-level data acquisition. We face the challenge of processing these data with various frequency, polarization, imaging modes, etc., and retrieve information in precise and efficient ways.

In the big data era, advanced hardware and high-performance computing technologies are being invented rapidly to tackle the data challenge. Recently, deep learning is showing its self-learning power, and successfully applied to variant fields including image understanding. These will no doubt provide chances and even lead to fundamental changes in SAR remote sensing.

The aim of this Special Issue is to share our experiences of processing of SAR data with large volumes and variant modes, and information retrieval with advance algorithms. The scope includes high performance computing, machine learning, deep learning, object recognition, parameter retrieval algorithms.

Prof. Chao Wang Prof. Mihai Datcu

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