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# Deep Learning for X-ray and X-ray Scattering Images

Guest Editor:

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Deadline for manuscript submissions: closed (11 August 2018)

### Message from the Guest Editor

Dear Colleagues,

Visual inspection of x-ray and x-ray scattering images is a popular technique for probing the physical structures of objects. It can be used to reveal broken bones, diagnose diseases, and study the phase transitions of materials. Manual visual inspection, however, is a laborious, expensive, and error-prone process, which usually requires well-trained experts. To this end, there are many benefits of using computer algorithms for automatic visual inspection. One promising approach is to develop these algorithms using deep learning, given the recent advances and successes of deep learning in many other application domains. This Special Issue aims to provide a platform for researchers to present their methods and discuss the benefits and limitations of deep learning for analyzing x-ray and x-ray scattering images. We encourage submissions that describe deep learning techniques for enhancing and analyzing x-ray and x-ray scattering images. Topics of interest include: Image enhancement, noise reduction, segmentation, 3D reconstruction, image image classification, disease diagnostics, and prediction.

**Special**sue

Dr. Minh Hoai Nguyen

*Guest Editor*&lt



mdpi.com/si/12288





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### Message from the Editor-in-Chief

The imaging term, specific with journal, is to be considered in its broadest sense. Image processing, image understanding and computer vision are all terms related to imaging acquisition, its processing and the extraction of relevant information from the scene to obtain the underlying knowledge. All tasks related to the above items are oriented toward specific applications in a broad range of areas and topics. The *Journal of Imaging* is conceived as an efficient vehicle in the scientific community for the communication and transmission of the progress and research results in the topics covered.

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