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# **Applications of Deep Learning Techniques in Agronomy**

Guest Editor:

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Deadline for manuscript submissions:

closed (20 July 2022)

### **Message from the Guest Editor**

According to the United Nations predictions, the world population will increase by 2 billion by 2050. However, our current rates of improvements in food production fall far behind the population growth. To this end, new revolutionized techniques such as deep/machine learning are necessitated as one of the potential solutions.

We call for contributions that focus on leveraging artificial intelligence, machine learning, IOT sensors, remote/proximal sensing, and other new/emerging techniques to improve crop yields, increase agricultural efficiencies, and reduce food production costs. Potential topics include, but are not limited to, the following

- 1. Deep learning in high-throughput phenotyping
- 2. Crop yield prediction through deep and/or machine learning and various data streams
- 3. Drones and deep learning in agriculture monitoring
- 4. Effective irrigation through deep and machine learning
- 5. Al-based soil chemical analysis and fertilization
- 6. Crop disease mapping and management
- 7. Data analytics for decision support



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## Message from the Editor-in-Chief

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