

## Special Issue

# Deep Learning Methods and Applications for Unmanned Aerial Vehicles

### Message from the Guest Editor

Over the recent years, unmanned aerial vehicles (UAVs) have become more widespread, as they have been adopted to various practical applications, including aerial photography, surveillance, disaster relief, rescue missions, cargo delivery, and even air travels. These applications require accurate perception of the environments and self-control for successful completion of the tasks. While deep-learning-based AI systems have obtained impressive performance on various perception and control tasks, their large memory and computational requirements make it difficult for them to be applied to devices with limited computing power, such as embedded GPU systems on UAVs. Moreover, UAVs' unique operating environment gives rise to new problems that are not found in conventional environments (e.g., small object detection, 3D navigation, lack of training data, multi-agent learning). In this Special Issue on “Deep Learning Method and Application for Unmanned Aerial Vehicles”, we plan to tackle such practical difficulties that exist with applying deep learning-based AI systems to UAVs.

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