# **Special Issue**

# Challenges and Future Trends of 3D Image Sensing, Visualization, and Processing

## Message from the Guest Editor

The field of 3D image sensing, visualization, and processing has been thriving and growing in the last decade, by the increasing demand for accurate and efficient 3D sensing technologies across multiple industries, such as robotics, autonomous vehicles, and virtual reality, with remarkable progress although, facing many challenges and numerous future trends. Near future trends towards the development of more advanced 3D sensors and the integration of 3D sensing into mobile devices and other consumer products. Machine and deep learning and artificial intelligence will play an increasingly important role in processing and analyzing 3D data, while virtual and augmented reality will become more prevalent in industries such as production, gaming, healthcare, and education. In short, the future of 3D image sensing, visualization, and processing is likely to be characterized by continued innovation and growth. Potential topics include but are not limited to:

- 3D image sensing
- visualization
- processing
- machine learning
- deep learning
- augmented reality
- Industry 5.0

## **Guest Editor**

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## Deadline for manuscript submissions

closed (25 July 2025)



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