

Call for Papers
Special Issue on Neural Processing Letters

**Neural Networks and Learning Methods
for 3D Multimedia Semantic Analysis**

✚ Aims and Scopes:

Recent computing technology has led to rapid development of 3D applications in various domains, such as entertainment, tele-medical, 3D graphics, architecture design, and virtual reality. In recent years, 3D reconstruction based on images and 3D printing have become much popular all over the world in different domains, such as 3D models, biomedical organs and even houses. Under such circumstance, 3D data increases fast from multiple aspects. Regarding such large scale 3D multimedia data, there is urgent requirement for learning methods of 3D semantic analysis. In recent years, machine learning methods, especially neural networks, have been dedicated to 3D multimedia analysis. We note that it is still a challenging task due to the fact that most 3D models are hard to partitioned into semantic components and the semantic has also becomes difficult to define.

Recently, much research efforts have been dedicated to 3D multimedia semantic analysis and applications. Related works are extensively published in ACM MM, SIGIR, WWW and CVPR. Therefore, we see a timely opportunity for organizing a special issue to bring together active researchers to share recent progress in this exciting area. This special issue will target the most recent technical progresses on 3D multimedia semantic analysis and its applications in industry. The primary objective of this special issue is to foster focused attention on the latest research progress in this interesting area.

The special issue seeks for original contributions of neural networks and learning methods which address the challenges from 3D multimedia semantic analysis. The list of possible topics includes, but not limited to:

- 3D/2D representation and registration

- 3D/2D semantic extraction and annotation
- 3D/2D multimedia corpus construction
- 3D data management
- Learning methods for 3D semantic
- 3D semantic retrieval and recognition
- Object tracking under 3D circumstances
- Multimodal fusion methods for 3D data
- 3D semantic on medical field
- 3D semantic on robotics
- Applications of 3D semantic
- Other neural networks and learning methods for visual semantic analysis

Original papers that have not been submitted or published are welcome. Authors must follow the formatting and submission instructions, referring to the "Instructions for Authors" page at the journal website: <http://www.springer.com/computer/ai/journal/11063>. All papers will be rigorously reviewed by at least three reviewers based on the quality: originality, high scientific quality, well organized and clearly written, sufficient support for assertions and conclusion. Use the online Editorial Manager System <http://www.editorialmanager.com/nepl/> to submit your papers indicating the special issue.

Important Dates

- Submission Deadline: May 1, 2017
- First Round Review Available: July 1, 2017
- Submission of Revised Version: August. 1, 2017
- Final Decision: Sep. 15, 2017
- Camera-ready Deadline: Oct. 1, 2017
- Publication: Late 2017 (Tentative)

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