

## Call for Papers

### IEEE Computational Intelligence Magazine

#### Special Issue on Computational Intelligence in Computer Vision and Image Processing

Vision in general and images in particular have always played an important and essential role in human life. Nowadays, the field of computer vision and image processing has been applied to a high number of real-world problems ranging from remote sensing to medical imaging, artificial vision, and computer-aided design. The development of vision and image systems has attracted significant amount of attention recently from academia, industry, and government as well. Among many efforts toward this objective, computational intelligence research could provide important technical innovations to help the society to accomplish this goal.

To this end, the Evolutionary Computer Vision and Image Processing Task Force within the IEEE Computational Intelligence Society (CIS) organizes this Special Issue on “Computational Intelligence in Computer Vision and Image Processing” for the IEEE Computational Intelligence Magazine to present the state-of-the-art research focusing on computational intelligence techniques for image and vision development.

The specific topics solicited for this special issue will be mainly focused on the new CI methods and techniques for computer vision and image processing applications. The CI paradigms considered here are evolutionary computation, neural networks, fuzzy systems, or cross-fertilisation of these paradigms. The main aspects of computer vision and image processing include, but not limited to:

- Edge detection
- Image segmentation
- Image understanding
- Automatic feature extraction, construction and selection in complex images
- Object identification and scene analysis
- Object detection and classification in medical images
- Handwritten digit recognition and detection
- Face detection and recognition
- Texture image analysis
- Automatic target recognition in security applications
- Gesture identification and recognition
- Robot vision

#### Submission Method

Authors should submit their papers in PDF format to the lead guest editor, Mengjie Zhang, by email at [mengjie.zhang@ecs.vuw.ac.nz](mailto:mengjie.zhang@ecs.vuw.ac.nz). All papers submitted to this special issue will be rigorously peer-reviewed by experts in this field.

## **Important Dates**

To ensure timely publication of this issue, the following timeline will be used for this special issue:

Manuscript Deadline:	July 15, 2012
Notice of Review:	September 1, 2012
Final Manuscript Due:	October 1, 2012

We look forward to your submissions to this special issue!

## **Guest Editors:**

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