



Special Session:

Paradigms of Fuzzy Systems for Medical Benefits (FMB)

with

2014 IEEE World Congress on Computational Intelligence (WCCI2014)

<http://www.ieee-wcci2014.org/>

Beijing, July 6-11, 2014

Organizers:

Syoji Kobashi, *University of Hyogo*

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Aim:

The purpose of this special session is to disseminate and discuss recent and significant research issues on how Fuzzy systems can be used to solve challenging problems related to medical, biomedical, and healthcare fields. It is held under the *IEEE CIS Task Force of "Fuzzy Logic in Medical Sciences"*.

Topics of interest:

- Fuzzy logic-based medical diagnosis control system
- Fuzzy logic-based medical applications, Soft computing for medical applications
- Fuzzy logic-based affective computing and psychological evaluations
- Fuzzy data analysis - bioinformatics, medical informatics, pattern recognition
- Fuzzy optimization and control
- Fuzzy machine learning approach to medical applications
- Fuzzy machine learning approach to biomedical applications
- Neuro-fuzzy models for biomedical signal processing
- Signal processing of MRI, fMRI, EEG, ECG, etc.
- Smart diagnostic predictions of various diseases
- Applications in image processing and pattern recognition
- Fuzzy logic vs. other soft computing approaches
- Approaches based on neuro-fuzzy, evolutionary neuro-fuzzy, neuro-genetic, genetic fuzzy, fuzzy cognitive map
- Fuzzy inference systems, Assistive robotics
- Fuzzy temporal representation of knowledge
- Future trends, Datasets, Healthcare

Important Date:

Last date for submission:	20 Dec. 2013
Paper acceptance notification date:	March 15, 2014
Final paper submission deadline:	April 15, 2014
Early-registration deadline:	April 15, 2014

Submission Instructions:

Manuscripts submitted to the special session *FMB* should be done through the paper submission website of WCCI 2014 as regular submissions. It is the responsibility of the authors to make sure that papers submitted to the special session **clearly indicate the name of the special session the paper belongs to**. All papers submitted to the special session *FMB* will be subject to the same peer-review review procedure as the regular papers.

Please note that this Special Session is specifically & exclusively related to the **2014 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2014)**. When submitting their manuscripts, authors are recommended to follow these steps:

- Follow the manuscript-style information and templates of regular IEEE WCCI 2014 papers. Visit <http://www.ieee-wcci2014.org/Paper%20Submission.htm>
- Visit <http://ieee-cis.org/conferences/fuzzieee2014/upload.php> - select our Special Session from '**Main research topic*:**' dropdown list.
- Fill out the input fields, upload the pdf file and finalize the submission by December 20, 2013.

Please email to the organizers for any query and after submitting a paper.

Short Biography of Organizers:

Syoji Kobashi is an associate professor of University of Hyogo. He was a visiting scholar at Medical Image Processing Group (Prof. Udupa, IEEE Fellow), Department of Radiology, University of Pennsylvania in 2011. He received 14 international awards including Franklin V. Taylor Memorial Award (IEEE-SMCS, 2009), IEEE-EMBS Japan Young Investigators Competition (EMBS Japan Chapter, 2003). He has been serving on the chair of International Forum on Multimedia and Image Processing, and an associate editor of 4 journals including International Journal of Intelligent Computing in Medical Sciences and Image Processing. He is a promotion committee member of Japan society of fuzzy theory and intelligent informatics (2009-2014), and the chair of IEEE CIS Task Force of "Fuzzy Logic in Medical Sciences" (2013-).

Md. Atiqur Rahman Ahad is a faculty member of the University of Dhaka. He studied at the University of Dhaka (Bangladesh) for B.Sc.(Honors), M.Sc.; University of New South Wales (Australia) for Masters; & Kyushu Institute of Technology (Japan) for PhD. He was a JSPS Postdoctoral Fellow and Visiting Researcher in Japan. Ahad is author of 2 books ('*Motion History Images for Action Recognition and Understanding*', and '*Computer Vision and Action Recognition: A Guide for Image Processing and Computer Vision Community for Action Understanding*' – both available in Springer). He is part of a number of journals and conferences, especially he is an Editorial Board member of the journal of '*Scientific Reports, Nature*'. He Guest Edited in *Pattern Recognition Letters*. He is an organizer of several international conferences & special sessions. Ahad is a *General Chair* and organizer of the 'Int. Conf. on Informatics, Electronics & Vision (ICIEV)' <http://cennser.org/ICIEV>. The 3rd ICIEV will be held in May, 2014. He is the founding *Editor-in-Chief* of 'Int. J. of Computer Vision & Signal Processing' <http://cennser.org/IJCVSP>; 'Int. J. of Electronics & Informatics' <http://cennser.org/IJEI>; and 'Int. J. of Environment' <http://benjapan.org/IJE>. He received some awards, e.g., best paper awards in *IWCIA 2008* in USA, *BMFSA 2008* in Japan, *IEEE ICCIT 2011* in Bangladesh, *SICE International scholarship Award 2012* in Japan. He is looking forward to meet experts to learn, and establish networks to create more research activities. For more, please visit <http://aa.binbd.com>.