

Special Session: Man-Machine Interaction and Spoken Dialogue Systems

Session Chairs:

Dr. Puja S Prasad
Assoc. Professor
Geethanjali College of Engineering and Technology. Cheeryala (V)
Keesara (M), Medchal Dist.
Telangana, INDIA
Pin Code-501301.
Phone: 7330860535
Mailid-puja.s.prasad@gmail.com

Mr. J Uma Mahesh
Assistant Professor
Geethanjali College of Engineering and Technology. Cheeryala (V)
Keesara (M), Medchal Dist.
Telangana, INDIA
Pin Code-501301.
Phone: 8374878521
Mailid-umamaheshsjcet@gmail.com

Details of Proposed Session:

Human-Computer dialogue systems provide a natural language based interface between human and computers. They are becoming very hot research area in an intelligent accompanying robots, and so on. A Human-Computer dialogue system consists of three main domains called Natural Language Understanding (NLU), Dialogue Management (DM) and Natural Language Generation (NLG). Each of these area requires more research .Each area has been received, many improvements. The problem with the existing system is that it is built in traditional pipeline way, in which different areas are assembled sequentially, suffered from number of problems like error accumulation and expanding as well as domain transferring. Therefore, researchers on jointly exemplary several sub modules in one part or cross different parts have been prompted greatly in recent years, especially the rapid developments on deep neural networks based joint models. There is even a few works aiming to collaborate all subtasks of a dialogue system in a single model, namely end-to-end models. This session will introduces number active researcher who works on dialogue systems and gives a information on recent advances on variety subtasks at first, and then focuses on joint models for multiple subtasks of dialogues. We will introduce papers related to different joint models including integration of several subtasks inside NLU or NLG, jointly modeling cross NLG and DM, and jointly modeling through NLU, DM and NLG. Both advantages and problems of those joint models are discussed. We consider that the joint models, or end-to-end models, will be one important trend for developing Human-Computer dialogue systems.

Research Papers/Articles are energized on all subjects given below topics of interests, to empower interdisciplinary conversations of the most recent improvements in the field of Electrical, Electronics and Computer Engineering. All the Conference proceedings will be submitted to the IEEE Digital Explore library.

Topics of Interests: We invite original (un-published) research contributions on the following topics but not limited to

A research area for this special session includes but not limited to:

1. Man-machine communication and interaction
2. Basic principles of machine-to-machine communication
3. New means of communication
4. Man-machine system
5. The challenge of cerebral plasticity
6. Speech processing
7. Speech models and representations
8. Speech synthesis
9. Speech coding
10. Speech recognition
11. Dynamic time warping and hidden Markow models
12. Neural networks for speech processing
13. Speech enhancement
14. Speech and language generation
15. Speech synthesis
16. Speech transcription
17. Spelling correction
18. Spoken dialogue systems
19. Term extraction
20. Text categorization
21. Text summarization
22. User modeling

Proposer Details

Dr. Puja S Prasad
GCET Hyderabad

Puja S Prasad is an academician and active researcher with 10 years of teaching and research experience. An active researcher in the field of Computer Science and Information Technology, involved with various research works related to face recognition, Image Processing, Pattern Recognition, Biometrics and her PhD work has been on iris and fingerprint feature Retrieval Systems. She has published most of her research papers related to Image Processing Systems and Computer vision methods with reputed publishers like Scopus Web of Science and Springer and also published book chapter in Taylor and Francis Books. At present, working as Associate Professor at Geethanjali College of Engineering and Technology Hyderabad.

Mr. J Uma Mahesh
GCET Hyderabad

Mr. J Uma Mahesh is an Assistant professor of Department of C.S.E in Geethanjali College of Engineering and Technology Hyderabad with 10 years of teaching experience. He did his graduation and Master of Technology from JNTUA University, and pursuing PhD from (K.L University), His research interests include Data mining, Data Science, AI & ML, He has published 11 papers in national/international journal conferences and published 3 book chapters in Pearson, Springer, BSP publications. He published 2 patents and got certified from Service now Company as a Service now Certified Application Developer.