

Proceedings of 2005 IEEE

International Conference on
Natural Language Processing
and Knowledge Engineering
(IEEE NLP-KE'05)

Oct. 30 – Nov. 1, Wuhan, China



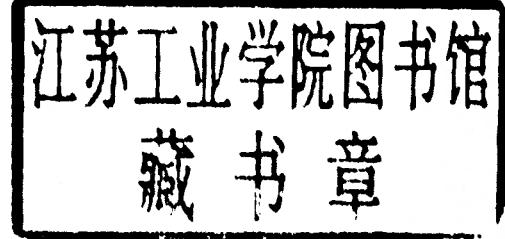
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Oct. 30 – Nov. 1, 2005, Wuhan, China



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Greetings from Conference Co-Chairs

Dear colleagues and friends,

With great pleasure in this beautiful season, on behalf of the conference organizations, we would like to deliver our warm greetings and heartfelt welcome to our old and new friends from all over the world for participating in the 2005 IEEE International Conference on Natural Language Processing and Knowledge Engineering, which is jointly sponsored by Chinese Association for Artificial Intelligence (CAAI), Chinese Information Processing Society of China (CIPSC), IEEE Signal Processing Society (SPS), and IEEE Beijing Section.

The ever-increasing trends of economic globalization and international cooperation have presented a very strong demand, and pressure for overcoming the language barriers among all nations on the planet. This is a tough yet glorious task put on the shoulders of scientists and engineers as well as students in the related fields. It is our responsibility to find the solutions for meeting the demand from the international community as soon as possible and as proficiently as possible.

It seems that there is no single way to reach the goal. Rather, we have quite a number of different approaches such as statistics-based, rule-based, linguistic-based, etc. to deal with the problems and each of them has its strong and weak points as well. Therefore, it would be wise to find methods that can integrate their merits while avoiding their demerits at the same time. This is the philosophy of “Multi-Wining Strategy”. To this end, IEEE NLP-KE designed such a platform a couple of years ago by bringing together the NLP and the Knowledge Engineering researchers and tried to make NL to be understood more easily by a machine. We are happy to say that the first conference in 2003 and the second in this year have been very successful so far. We would like to see that the conference series grow up continuously serving as one of the best forums for sharing experiences and progresses, exchanging ideas and seeking opportunities for cooperation among researchers in the world.

We would like to express our special thanks to our distinguished keynote speakers, Dr. Makoto Nagao, Dr. Eduard Hovy, Dr. Keh-Yih Su, and Dr. Hans Uszkoreit, the world leaders in the field, for their excellent contributions to the conference. Our gratitude also goes to Dr. Shingo Kuroiwa and Dr. Tetsuya Tanioka for their contributions in organizing wonderful special sessions, ASR and Artificial Emotion. Our sincere thanks are given to all session chairs, PC members, reviewers, authors, participants, conference organizers and the great number of volunteers for their valuable efforts. Without their contributions, the great success of the conference would be impossible.

Sincerely wish all colleagues and friends have joyful stay during and after the Conference.

Prof. Fuji REN, The University of Tokushima, Tokushima, Japan

Prof. Yixin ZHONG, University of Posts & Telecommunications, Beijing, China

Sept. 15, 2005

Welcoming Message from Program Committee Co-Chairs

Dear colleagues and friends,

On behalf of the Program Committee, we are pleased to welcome you to join in the IEEE International Conference on Natural Language Processing and Knowledge Engineering (IEEE NLP-KE'05), held October 30th – November 1st, 2005, in Wuhan, China.

Total 281 submissions were received from 18 countries and regions this year. About 88% of them come from Asia, while the rest are from Europe (5%), North America (5%) and Australia (2%). After careful reviewing, 155 papers (55%) were accepted as oral presentation. Since the review is so selective, we were forced to give up many high quality papers.

This year we are honored to have four international recognized invited speakers: Dr. Makoto Nagao, Dr. Eduard Hovy, Dr. Keh-Yih Su, and Dr. Hans Uszkoreit. We would like to extend our special thanks to them for kindly agreeing to present their unique perspectives in this conference.

Holding an international conference of such a scale takes a lot of effort. We feel very happy that the organization people did in very good cooperation for making it happen. Special thanks are due to the Conference Co-Chairs Prof. Yixin Zhong and Prof. Fuji Ren, the Organization Committee Co-Chairs Prof. Youqi Cao, Prof. Jiansheng Zhang and Prof. Zude ZHOU, and the Publicity Chair Prof. Xiaojie Wang, for their advices, supports and studious work. Many thanks are also due to the Conference Secretariats Weining Wang, and Yongmei Tan.

In addition, reviewing papers from various fields is always not an easy task. Some additional invited reviewers made much effort for helping us. Our special thanks go to them for their kind support and hard work.

Also, the Program Committee would like to express many thanks to those people who organize the special sessions for the conference.

With all the efforts made by our friends, we have a competitive technical program. We feel very confident that the conference would be very fruitful and attractive.

Last, welcome again to IEEE NLP-KE'2005 and enjoy our program.

Prof. Chengqing ZONG, Institute of Automation, Chinese Academy of Sciences, China

Prof. Maosong SUN, Tsinghua University, China

Sept. 15, 2005

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Brief Program of IEEE NLP-KE'05				
Time	Sunday, October 30, 2005			
9:00-9:30	Opening Session			
9:30-10:20	Keynote Speech: Natural Language Processing and Knowledge <i>M. Nagao</i>			
10:20-10:40	Break			
10:40-12:10	Session 1 Word Sense Disambiguation	Session 2 Language Modeling-1	Session 3 Speech Recognition-1	Session 4 Speech Synthesis
12:20-13:50	Lunch			
14:00-15:40	Session 1 Spoken Language Processing and Dialog System	Session 2 Language Modeling-2	Session 3 Speech Recognition-2	Session 4 Natural Language Understanding-1
15:40-16:00	Break			
16:00-17:40	Session 1 Machine Translation-1	Session 2 Natural Language Understanding-2	Session 3 Lexical Resources and Corpus Base	Session 4 Natural Language Learning, Generation and Text Mining
18:00-20:00	Dinner			
Time	Monday, October 31, 2005			
8:30-10:00	Session 1 Machine Translation-2	Session 2 Ontology, Semantic Web and Knowledge Acquisition	Session 3 Machine Learning	Session 4 Statistic vs. Linguistic Approaches and Systems Evaluation
10:00-10:20	Break			
10:20-11:50	Session 1 Information Retrieval-1	Session 2 Text Categorization-1	Session 3 Knowledge Representation and Discovery	Session 4 Multi-lingual, Multi-Function and Multi-Media Systems, Multi-Agent Systems
12:00-13:30	Lunch			
14:00-15:40	Session 1	Session 2	Session 3	Session 4

	Information Retrieval -2 and Induction-Based Knowledge Creation from Information	Text Categorization-2 and Text Summarization	Information Extraction	(Special Session) Processing of Emotion and its Application for Human Support
15:40-16:00	Break			
16:00-17:40	Session 1 Other Issues Related to Knowledge Theory	Session 2 Other Applications	Session 3 Applications in E-Commerce, Education, and Large-scale International Events	Session 4 Information-Knowledg e-Intelligence Transformations and Web-page Security Monitoring
18:00-20:30	Banquet			
Time	Tuesday, November 1, 2005			
8:30-9:20	Keynote Speech: Moving toward Semantics for Language Processing: Recent Advances in Resource Construction and Application <i>Eduard Hovy</i>			
9:20-10:10	Keynote Speech: To Have Linguistic Tree Structures in Statistical Machine Translation? <i>Keh-Yih Su</i>			
10:10-10:30	Break			
10:30-11:20	Keynote Speech: Shallow Language Processing, Deep Language Processing and Domain Ontologies <i>Hans Uszkoreit</i>			
11:20-12:20	Panel Discussion: NLP and KE			
12:30-12:50	Close Ceremony			
13:00-14:00	Lunch			
14:30	Tour			

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