CLE SEMINAR SERIES

Topic: NLP Implementation on Quran Text & AI Base Systems for Arabic Language

Presentation Date: Friday, 30th October, 2015

Venue: KICS Seminar Hall

Time: 11-30 am - 12.30 pm

ABSTRACT

Quran text and Arabic Language - Classical Arabic (CA), Modern Standard Arabic (MSA) are important areas for the researchers of Natural Language Processing (NLP) and Artificial Intelligence (AI). Various research groups around the globe are working over these areas in educational institutes as well as in industry. Arabic language is also under consideration of researchers, there are lot of high quality research works and tools available in this regard. Arabic is language of Quran and Hadith, but efforts to structure and promote friendly learning environment for Arabic is still needed to be worked like a charm. There is need to develop the friendly learning environment for Arabic language learning, and also to produce research tools for researchers to improve the speed and quality of the research.

This discussion will be focused on the covers following two areas

- 1. NLP techniques applied on Quran text.
 - a. Conventional computational techniques for Quran.
 - b. Advance level efforts in this area.
 - c. Development phases and current position of presenter's work of Quran text morphological tagging.
 - d. Future working dimensions.
- 2. AI base systems for Classical Arabic and Modern Standard Arabic.
 - a. Development of Algorithms for Arabic Conjugations systems.
 - b. Development of translation systems for these conjugation systems for Urdu and English.
 - c. Development of teaching modules.
 - d. Development of examination modules.

ABOUT PRESENTER

Mr. Haq Nawaz is a Software Engineer, and 8th year (Final Year) student of Dars-e-Nizami in Jamia Ashrafia Lahore. His research areas are Natural Language Processing (NLP) techniques applied on Quran text, and Artificial Intelligence (AI) base systems for teaching and evaluation of Arabic Language, both Modern Standard Arabic and Classical Arabic. And also to develop the research tools for researchers of said domains. He has presented his work in several universities and institutes in Pakistan as well as in international conferences including.

NOORIC 2013 Taibah University International Conference on Advances in Information Technology for the Holy Quran and its Sciences, Madinah Munawara.

UCREL Corpus Linguistics 2013 WACL-2 Lancaster University UK.

IMAN2014 2nd international conference on Islamic Applications in Computer Sciences Amman Jordan.

The 5th Annual International Qur'anic Conference 2015

MUQADDAS 5 University of Malaya Kuala Lumpur Malaysia.

He also is senior member, and consultant of different Unicode base Urdu projects including famous Quran and Hadith desktop software "Easy Quran Wa Hadees". Web base Unicode project of "Tanzeem Islami Digital library " and Online Unicode Hadith project. <u>http://cacpak.com/</u>