BSIT-S20-003

03-135171-009 WAJAHAT ALI

Al-Mua'vin; An Arabic Reading Assistant for Urdu

In partial fulfilment of the requirements for the degree of Bachelor of Science in Information Technology

Supervisor; Dr. Aasim Ali

Department of Computer Sciences
Bahria University, Lahore Campus

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ABSTRACT

Arabic is one of the leading Semitic language in the world. The estimated Arabic speaking population in the world is 420 million. Arabic gives impact on vast amount of people according to a study the total population of Muslims around the world is 1.8 billion and There are six official languages of United nations (UN) and Arabic is one of them. It is an official language of six united nation countries. The past few decades have witnessed an increased interest in Arabic natural language processing, and computational morphology. It is difficult to read Arabic for the south Asian people because of lack of knowledge about diacritics (*Airaab*: zer, zabr, pesh, jazm, tashdeed, tanveen and hamza) then there are 104 million people in the world who speak Urdu.

The idea is to develop a web-based application to transliterate Arabic in Urdu with natural language processing. It will assist Urdu users to read Arabic in their native orthography. The tools would be figma/visio and other if needed for the prototype. The interface will be design on flask. We will use the Natural language processing techniques with machine learning algorithms.

(Note: The United Nation statistics from: https://www.un.org/en/sections/about-un/official-languages/index.html)

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