ABSTRACT

The most precious thing changing techno world is time. To Automation technology comprises all processes and work equipment that enable system to run automatically. Process automation manages business processes for uniformity and transparency. It basically handled by software and business apps. Using automation can increase productivity and efficiency within our business. It can also deliver new insights into business challenges and suggest solutions. The most complex level of automation is Artificial Intelligence (AI) automation. The addition of AI means that machines can “learn” and make decision based on the past situation they have encountered and analyzed. This project is entitled “SIGMA-Spoken Dialogue System” is AI based system, develop using python language, AI technology (Machine learning, Deep learning and Natural Language processing) and supported libraries. The past decade has been the development of a large numbers of spoken dialogue systems around the world, both as research prototypes and commercial applications. These systems allow users to interact with a machine to retrieve information, conduct
transactions, or perform other problem-solving tasks. Spoken Dialogue System is not easy to implement and work in real world, we have to focus on the conversation process and machine should able to understand human languages and it should understand the semantics and structure of the human language. Considerable progress has been made in recent years in the development of dialogue systems that support robust and efficient human-machine interaction using spoken language. Spoken dialogue technology allows various interactive applications to be built and used for practical purposes, and research focuses on issues that aim to increase the system's communicative competence by including aspects of error correction, cooperation, multi-modality, and adaptation in context. Here we go comprehensive view of state-of-the-art techniques that are used to build SIGMA-spoken dialogue systems. We are working the issues in architectures, dialogue management methods, system evaluation, and also surveys advanced topics (face detection) concerning extensions of the basic model to more conversational setups. And we focus on problems, and solutions that are used in SIGMA Spoken dialogue system development and evaluation. We are also focus on requirements and challenges for advanced interaction management and future research on this system.