Unisys Natural Assistant (UNA)

An AI assistant is a software program that helps a user with his/her day-to-day activities and tends to make life simpler by cutting down the number of steps the user has to go through to get some task done. It could be in the form of some hardware like a speaker or come in-built in a device like a cellular phone.

The most common technologies and concepts used in AI assistants today include speech recognition, Natural Language Processing(NLP) and Machine Learning(ML). Speech recognition helps take inputs from a user, NLP helps understand the commands of the user and take the necessary steps as per the desired request of the user and ML generally performs a task and learns whether or not the goal is accomplished and accordingly produces results the next time.

UNA was made keeping in mind the long-term productivity and efficiency of the employee. To help achieve this efficiency, we have made use of the rich supply of libraries on Python. Our entire application is built using the Kivy framework. Kivy is an open source Python library for rapid development of applications that make use of innovative user interfaces such as multi-touch apps. The fact that it was open source, cross-platform and GPU accelerated made it an attractive option. An application built using Kivy can also be easily deployed on a system equipped with Windows, MacOS, Android or iOS and this was only a bonus. Some other important modules used in order to build UNA include Wikipedia, webbrowser, SpeechRecognition, pyttsx3 for an intuitive UI, mysql, fuzzywuzzy, datefinder, PyAudio, ffmpeg, soundfile, punctuator, nutshell and pynutshell to name a few.

Our AI assistant boasts a variety of features including browsing the internet and Wikipedia, setting reminders, setting up or looking up your schedule via Outlook Calendar, Email on Voice commands(with attachments of any format) to one or multiple senders and implemented as a first in any AI Assistant ever made, Minutes of Meeting.

MoM takes the video or audio recording of the meeting as input, outputs the summary, and highlighted keywords from the meeting in a text file. It dynamically reduces the summarized text to the user’s preferred length. The summarized document can work both as a recap if you have missed the meeting or as a quick reference for the meeting in the future.

And for the icing on the cake, you are served with a simple elegant GUI that completes tasks swiftly without any cumbersome looking menus.