**Client Server Architecture in Siri**

**Abstract**

An emerging trend in Information Technology is the use of personal digital assistants such as Siri. Siri is Apple company's personal digital assistant that uses Speech recognition and Natural Language processing to understand and interpret human input. Siri can make calls for you, set reminders, make reservations, and even make jokes to brighten your day. Another popular pick is Google Assistant, which is Google's personal digital assistant, Siri's competitor.

Siri uses a client-server architecture to process user requests. First, a users speech is recorded and the recording sent to the servers for analysis. Siri breaks down the recording into individual words closely corresponding to a common sequence of words. Siri then identifies key words to make sense of the request before carrying out a corresponding action. Apple servers send information back to your device and Siri may speak back to you. Apple has a distributed chain of data centers which act as data warehouses which provide Siri with data.

Siri performs tasks on the server side while Google assistant performs tasks on the client-side. Google Assistant performs the initial voice recognition on the device before pulling information from the server whereas Siri performs nearly all tasks on the server.

The goal of this research is to understand how Apple company makes use of the client-server architecture to drive Siri. This will make it possible to model a custom-made Personal Digital Assistant that can be employed in the casual day to day activities. This will extensively cover how Siri handles high traffic due to the large number of user requests on Apple's servers, and the facilities that enable Siri to respond effectively and lighting fast.