ANDREW LEE

9 ASSISTANT 5

Amazon recently unveiled Alexa a suit of products poised to compete with the likes of services such as Google Now and Apple Siri. Along with the general hype and advertising for the new compatible products, Amazon (coming into the voice recognition product market a few years behind its competitors) released the complete API, called Alexa Voice Service to developers in the hopes that developers would embrace the API, and develop 3rd party applications which would truly give Amazon a unique market to tap into





Now the API basically consists of the backend which allows a developer to use Javascript to create applications which take human voice input, and either return relevant information (via the Amazon Alexa Intelligent Cloud Server) or to control home products.

However, utilizing the "control home products" option, I believe this would be the perfect solution to do the heavy lifting for parsing human voice recognition, and turning that into a stream of text

GNU Prolog on its own has no capabilities to connect to the world via the internet, or to talk to programs written in other languages. However someone has successfully implemented a partial solution which allows Prolog to communicate over UNIX sockets, parse JSON text and even work in conjunction with scripts written in node.js utilizing a message broker called ZeroMQ

Combining the natural voice parsing abilities of Amazon Alexa Voice, the plan is to create an application that takes in raw analog human voice, converts this into a standard input stream of type string/char, then utilize the ZeroMQ + Prolog implementation to interpret this data from a semantic network dictionary such as ConceptNet5, then execute something from that.

Since GNU Prolog does not run on ARM machines yet, I will have to run this on my Ubuntu Laptop. As of now, I have been able to install Alexa Voice API, ZeroMQ, and GNU Prolog.