

CST3140 Novel Interaction Technology

Labwork 2: Exploring Voice User Interfaces

Voice is increasingly important as a medium for human-computer interaction, both as a means of input and output. Although voice interaction is now being incorporated into a variety of products – phones, TVs and computers as well as speech-based products like the Amazon Alexa devices, the design of voice interaction remains complex. In this session you will experiment with voice interaction to explore some of the capabilities of modern VUIs, and understand what some of the design issues are.

Find an existing voice user interface on a device you have access to.

This could be Siri or Cortana on a computer or phone, or a ‘smart speaker’ or ‘intelligent assistant’ device like the Amazon Echo, Fire TV, Apple HomePod, etc.

Experiment to discover as much as you can about how it works.

Try simple questions: “what’s the weather like today”, “switch to my calendar”, etc. As you try things out, record (or note down) the result.

Explore variants of these: “show me the weather”, “what’s it looking like outside today”, “is it raining”, etc.

Do these variants all do the same thing? Similar things? Is the result predictable?

Explore what it can’t do. Does the assistant ever give up, produce error messages, fail to recognise input? How does it handle these situations?

Try the same sort of experiments with other devices.

In doing all of this, see if you can come up with an explanation, or a ‘theory’ of how the device works that explains the kinds of behaviour you are seeing (and hearing).