Week 4

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Hi week four. So what do we have in week four? We have some very interesting topics. Some of these probably are new to will be new to many of you. Let's see what they are.

Week 4

- ASR and TTS : Rajesh Hegde
- Identity and Location Detection: Saurabh Srivastava
- Sensors: Neeta Singh

The first one is about ASR and TTS. ASR stands for Automatic Speech Recognition and TTS stands for Text to Speech Synthesis. Now what we are doing is trying to interact with the phone using speech, trying to interact with the computer system for which the phone is the front end through speech and the computer system wants to talk back to us. It wants to convey the information back to us using speech. So it must understand what we are saying. That's called automatic speech recognition and then having computed an answer or extracted some information from its databases which to convey to us instead of just showing on the screen it will speak it out. There may be a large number of users who can't read for example.

So in for them you know if it talks it will be very very convenient. There may be scenarios where speech is easier than some display on a small screen. So these two topics how does the computer recognize your voice and how the computer talks back to you automatic speech recognition and text to speech synthesis are covered by Professor Rajesh Hegde. He is in the electrical department at IIT Kanpur.

The next topic is when you talk to the computer either through your phone call or through logging into the machine connecting to a website and so on, it knows who you are. It can recognize the user. How does it recognize? What technologies does it use to figure out who the caller is? Who the user is? Not only that it knows where you are calling from quite often quite precisely. So how does it know from where you are making the connection with the system? So this is what we call identity cognition and location detection.

So we have two lectures on these two topics by Saurabh Srivastava who is a PhD student at the CS department at IIT Kanpur.

The third topic is on sensors. What a sensor. We know about temperature sensor for example. A thermometer can sense the temperature but when I want to work with agriculture then I must look at parameters which are probably not just temperature but also like the humidity. So Dr. Neeta Singh who is with [Indiscernible] [00:03:01] IIT, Kanpur is going to talk about sensors and she will demonstrate a very simple sensor which can detect things like pH value or humidity and so on.

Live Hangout

- Transcript available in the Resources Section
- Another one two weeks from now

So that is the set of lectures we have for this week. Now last week we had a very interesting live hangout. A large number of you have participated. For those of you who are missed you can actually go to the resources section on the website and there is a YouTube link. The video is recorded and kept. You can go through some of that. There were some very interesting questions and I guess everybody enjoyed asking questions and answering questions. We hope to repeat this hangout two weeks from now again. So please try to attend that session live so that you can actually interact with the instructors.

Quiz

- Good performance
- Another one coming

We have had a quiz. I'm very happy to note that large number of people got very good marks. Some of them 100 out of 100 and as a teacher I am very pleased with that. We will have another quiz at the end of week 4 again and it will be good to recapture the important points in these two weeks during the quiz. So have fun.