Title of tutorial: Speech in Mobile and Pervasive Environments

Content: "Speech in Mobile and Pervasive Environments" proposes to deal with issues related to speech processing on resource-constrained, wireless, mobile devices including: Speech recognition in noisy environments, the use of context to enhance recognition, the emerging and new standards required for interoperability, speech applications on mobile devices, distributed processing between the client and the server, and the relevance of SiMPE for developing regions, an area of explosive growth in the last 3-4 years.

Until recently, speech processing has been the pursuit of a handful of researchers working in laboratories on specialised applications. The proliferation of the mobile device is making speech "mainstream". Many novel and interesting applications are being offered on the mobile device, and the mobile platform brings its own opportunities and constraints. There is a rapidly growing interest as indicated in academic conferences and workshops (Mobile HCI, Pervasive Computing), as well as considerable investment in the industries (for example, Telecom industry).

There is a large number of professionals, across many disciplines – computer science, electrical engineering, UI design and information technology – who are creating applications and solutions for this mobile platform. Standards such as VXML and technologies such as VoIP are emerging.

In our tutorial, we will give a flavour of the various issues surrounding SiMPE. It will fill the gaps for the electrical engineer, as well as the information technologist so that they get an all-round view of the issues and approaches around SiMPE.

Pre-requisite for attendees (if any): None.

Lab component: None.

Infrastructural requirement: None.

Media of tutorial material (CD, lecture notes, printed handouts, book etc.): Printed Handouts.

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