

A. Solon, P. McKeivitt, and K. Curran, “Mobile MultiModal Presentation”,

This paper provides a way to implement “TeleMorph” system (a mobile intelligent multimedia presentation system). After introducing the developing status about multimodal interfaces on laptop devices, the author pointed out that one critical issue need to be solved when implement multimodal UI on mobile devices is to morph between modalities depending on the network bandwidth. Based on the introduction about the architecture, detailed implementation techniques on each block were quoted.

Technical aspects:

- (1) Use a combination of Low-level UI API and High-level UI API to take advantage of both portability and flexibility.
- (2) Integrated an autonomous agent to incorporate natural modalities.
- (3) Use SMIL language to output audio on client when the bandwidth is available.
- (4) Use HUGIN development environment to create BBN.
- (5) To integrate several moduls with different tasks, select JATLite middleware.

Issues remained:

For speech recognition in client input, speech recognition modul is too computationally intensive to realize in the client device.

The author provided the background of the technique based on which proposed the TeleMorph system. Illustrated the structure of the system and explained related techniques or softwares to realize this.