Speak, Find. ...EASY!

Single-Input Voice Search for Mobile — including very long lists

Yoon Kim — Melvyn Hunt

Novauris Technologies
The Voice Search Company
Novauris Single-Input Voice Search Demonstrations

- To make the demo results easily visible
  - all demos are run over a network
  - the results are sent to a webpage for projection here
    - the sole exception is the operational VZW-Medio-Novauris Get It Now Search application, which can’t use a webpage

- The demos use:
  - 3G data links
  - cellphone voice links
  - fixed-line telephone or VoIP links
    (when sound output is important)

- Most demos can be run over any kind of link
Overview of Novauris
Single-Input Voice Search Demos

- **Location-related searches**
  - 245 million US names & addresses
  - Any number-street-city-state address in the U.S.
  - >>10 million POIs + generic categories

- **Entertainment –related searches**
  - Song titles & artists (130,000 titles, 20,000 artists…)
  - VZW Get It Now Search
  - TV programs 10 days, 70 channels

- **“Free” language inputs**
U.S. Names and Addresses spoken as a single shot

- 245 million U.S. names & addresses
  
  *e.g.* "Brandi Martz, 8583 Lansdale Court, Orlando, Florida 32818"

- Real addresses, interpolated house numbers, names synthesized from frequency data in US census.

- Example application: self-identification of caller who does not have his/her ID number available.
Novauris Single-Input Location Entry (1)

- All basic US addresses:
  - Entered as a single input number – street – city – state
  
  e.g. “333 West Harbor Drive, San Diego, California”

~ 5 million street-city-state combos X all numbers
Novauris Single-Input Location Entry (2)

- US Points of Interest (POIs)
  - Single input
    POI in city – state
  
  e.g. “San Diego Marriot Hotel & Marina, in San Diego, California”
  
  >>10 million specific POIs
  
  + 270 generic categories + synonyms & variants
    for all cities
  
  e.g. “Ice cream parlors in La Jolla, California”
Novauris Single-Input Entertainment Requests (1)

- Music Selection. The spoken entry can be:
  - Title by artist (250,000 items)  e.g. “Hips don’t Lie by Shakira”
  - Artist, title (250,000 items)  e.g. “Shakira: Hips don’t lie”
  - Just the title (130,000 items)  e.g. “Hips don’t lie”
  - Just the artist (20,000 items)  e.g. “Shakira”

- Selection of Music, Games, etc.

Verizon Wireless Get It Now Search
- Operational since August 2006
- ~ 1 million voice-accessible items
- For more on this, please come to:
  “The World’s Largest Multi-modal Search Solution – Challenges, Solutions & Opportunities”
  Session A202, Tuesday 11.15 a.m.
Novauris Single-Input Entertainment Requests (2)

- TV Program Selection using EPG
  - e.g. “Record Desperate Housewives on NBC on Monday Night”
  - 20,000+ items
  - covers 70 channels (+ synonyms)
  - for 10 days
“Free” Language inputs

- Specific demo to be determined, examples are:
  - Inputs to a spoken-translation system
  - Instructions to a human-like robot
  - Inquiries to an automated tech-support system

- For more on this, please come to:
  “Natural Language Input for Voice Search”
  Session B203, 1.30 p.m. on Tuesday