

## Professional Speech Processing

# The value of voice – easing access to complex functionality

Siemens AG, Corporate Technology  
CT IC 5

## Web services provide valuable information

- *“My child is sick – I need a doctor nearby!”*
- *“Where do I find a parking lot at my destination?”*
- *“I am hungry – can you recommended an Italian restaurant on my route?”*
- *“The trip will take longer – which hotel on the route offers affordable rooms for tonight?”*
- *“What is up tonight in my city?”*



Yellow pages and other services like from T-Com, Eventful or Automotive Associations will play an important role while on a trip

## Concern about visual information presentation

### Surfing the web while driving?

- Traffic court council requests the prohibition of visually distracting devices in cars
- Insurances will refuse payment for damages, if the driver's attention was distracted by screen reading

**Süddeutsche Zeitung**  
MÜNCHNER NEUESTE NACHRICHTEN AUS POLITIK, KULTUR, WIRTSCHAFT UND SPORT  
**Mit Sicherheit am Ziel vorbei**  
 Experten warnen vor immer mehr Ablenkung im Auto / Auch Fahrer

vertreib; andere wurden dabei erwischt, wie sie in voller Fahrt im Internet surfen. Weil „solches Verhalten unverantwortlich ist“, fordern jetzt die Delegierten des 46. Deutschen Verkehrsgerichtstags „ein Vertriebsverbot für Geräte“, die während der Fahrt visuell unterhalten oder die Sicht oder Fahrzeugbedienung behindern. „Die Zahl der Reize, die

Für die Juristen aber ist klar, dass Autofahrer im Ernstfall bei technischer Überforderung selbst verantwortlich bleiben. „Wer von der Fahrbahn abkommt, weil er zu lange auf einen Bildschirm geschaut hat, muss für den Schaden aufkommen“, erläutert Jörg Elsner, Vorsitzender der Verkehrsanwälte im Deutschen Anwaltverein (DAV) – und

New services available in the “always-on” car are likely to be prohibited due to visual distraction

## Important steps towards a safe interaction

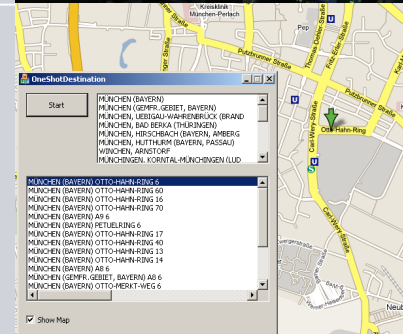
### SmartWeb Kfz @ CeBIT 2007

- Access to a variety of web services by smart voice dialogs
- Traffic info, weather, hotel booking, entertainment



### Navigation control for your favorite car

- Recognition of up to 350.000 spoken city and street names simultaneously
- *Real* one-shot destination input



### Innovations at IAA motor show 2007

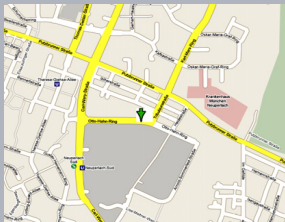
- Title selection for easy access to entertainment
- Voice-enabled car manual for immediate help





**We are able...**

...to find a destination like talking with a human



**One-shot  
destination  
input**



**Restaurant  
search**



**Gas-station  
search**



**We are able...**

...to talk to web services that provide up-to-date information



Speech-enabled  
web services

for  
everyday  
help



**We are able...**

...to retrieve meaningful information from the internet



Voice dialog  
with the  
internet

and

SmallTalk  
manager



**We are able...**

...to interact naturally with entertainment devices



**Media-player  
control  
by voice**





**We are able...**

... to ask the car how to open the engine hood



Voice-enabled  
car  
manual



# Professional Speech Processing

## The world of speech technology



### Applications

<b>Platforms &amp; implementation</b>	Server products		Application support		Embedded products	
<b>Technology &amp; tools</b>	Speech recognition	Speech synthesis	Voice dialog	Speaker biometrics	Hands-free	
<b>PSP groups</b>	Innovation	Technology	Natural Language Understanding		Embedded Products	
<b>Basic technology &amp; know-how</b>	Spoken language resources, in-depth market knowledge 25+ years of experience in speech technology					

## Created to fit markets & applications

### Automotive

Destination input for navigation; hands-free telephony; infotainment & WebService access



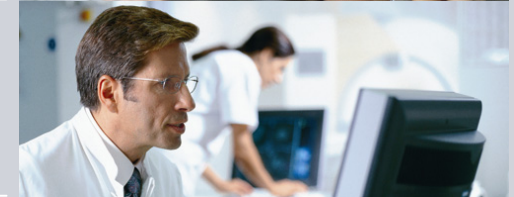
### Communications

Call-center automation; hands-free telephony; speech enabled web-services; speaker adaptive dialogs



### Medical

Hands-free, eyes-free control of equipment; bed side terminals; hospital information services



### Industrial

Hands-free data entry/workflow management; industrial HMI panels; remote maintenance



### Consumer

Remote control; voice enabled games; multimedia control by voice





Thank you  
for your attention!

