



Speech Technology Consortium and the SpeechMap Project

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Introducing STC

- Bringing the industry together to address:
- Challenges for the industry
 - Non-practicing entities and others see profits through the courts
 - Costs of fighting even “obvious” cases are prohibitive
 - Each “success” through settlement drives more suits
 - Just being the object of a suit creates losses
 - Hard to know what’s been done independent of patents
- Challenges for the patent office
 - Huge flow of patent applications through an overburdened system



How can a Consortium help?

- An independent consortium
 - Provide a mechanism for sharing knowledge
 - Provide industry wide resources
 - “Spotlight” aggressive behavior
 - Identify patterns
- Members can
 - Keep abreast of patent issues
 - Use the resources for specific cases
 - Contribute to a stronger industry



STC 2010 Accomplishments

- Formed an active board made up of industry leaders
- Assisted West in win against Phoenix Solutions
- Analyzed additional Phoenix patents for potential reexam
- Helped add speech to the USPTO's Peer-to-patent initiative
- Developed a strong working relationship with the USPTO
- Began the “SpeechMap” project



The SpeechMap Project

- Collaboration between the STC and the USPTO
 - Create a shared resource inventors, examiners, defenders
 - Create a link between patent documents and non-patent literature
 - Improve the quality of the existing and new patent pool
 - Provide a repository for past cases that can contribute to future ones





The Big Picture

- Patents are about “**what**”
- But to find related work you need to look at
 - **Why** the technology was developed
 - **Who** has worked in similar areas
 - **Where** the work was done
 - Research breakthroughs in the context of their systems
 - Projects across multiple institutions
 - People who were in specific labs at specific times
- **Context** is required to understand how the pieces fit



The SpeechMap Project

It takes a village ...

- déjà vu: Looking at a patent and saying
 - “We did that in 1982”
 - “Didn’t the Dinosaur system do that?”
- Speech is an old industry (in “internet” years)
 - Commercialization has been slow
 - Specialization keeps people in the field
 - Complexity keeps membership down
- Early prototype systems were “ahead of their time”
- But how to wade through literature to find what’s really relevant?

- Peer-to-peer application
 - “receiving speech of a first user...independent of ...the second user...and merging the text of the first user and the text of the second user into a transcript.”
- Where would I find prior art? Who has this problem?
 - Search on “speech meeting recorder”
 - [The ICSI meeting recorder dialog act \(MRDA\) corpus](#)
 - [Portable meeting recorder](#)
 - [The ICSI meeting corpus](#)
 - [Meeting recorder project: Dialog act labeling guide](#)
- What next?
 - Follow up on the ICSI project?
 - Follow up on the work of Liz Shriberg
 - Follow up on Multimedia ‘02 project?
 - Follow a different application such as call center analytics





SpeechMap Features

- Open source content management links the information and the community through group participation (Drupal)
- “Social tagging” lets researchers put their own content on the map
- Faceted indexing links not only topics
 - Multiple advances in
 - The same speech engine
 - The same lab
 - The same application
 - Addressing the same problems



What's in SpeechMap?

- Bibliography of references
 - Collection of references with specific “connections”
- Library of collected materials
 - Papers, documentation, technical reports
marketing materials not easily findable
 - The STC will only distribute those it has copyright permission for
- Database of institutions, systems, projects, researchers used to index the references



Join us!

- For information on how to join see me or another board member after the session
 - Or email membership@speechtechnologyconsortium.org
- Got (technical) Junk?
 - Put your past accomplishments to use!
 - Clean out the bottom shelf of your bookcase!
 - Anyone can contribute to the library
 - Prior art is in theses, technical reports, seminars, documentation, marketing materials
 - All public, but much of it obscure



Thanks!

- From the STC Board
 - Tom Schalk (Chairman)
 - Marie Meter (Executive Director)
 - Igor Jablovkov
 - Jeff O'Neill
 - Roberto Pieraccini
 - Mike Phillips
 - Robin Rohlicek
 - Ria Schalnat
 - Matt Yuschik