Can't Make it to a Meeting? Send a Computer Instead

August 6 2009

“There’s too much information out there,” said UT Dallas computer scientist Yang Liu. “We’re just trying to help people gain easier access to information.”

(PhysOrg.com) -- If you’ve ever wished you had an assistant to attend meetings with you, take notes and produce a concise summary, then you’ll be pleased to know that UT Dallas computer scientist Yang Liu hopes to one-up you: She’s working on software that would automatically do the job of that assistant.

She recently received a prestigious career-development award from the National Science Foundation that will fund a five-year, $400,000 project designed to find a more intelligent way to address issues related to speech summarization of meetings.

“We’re going to have a computer that will be a meeting note-taker that

can send the participants the meeting minutes," she said.

The award was presented by the NSF's Early Career Development Program, a highly selective program for junior faculty members who are considered likely to become leaders in their field.

"Imagine there's a mic sitting in the room, the entire meeting is recorded, and there are five or more people participating," Dr. Liu said. "If it's an hour long, you don't want to listen to a lengthy meeting. Being able to summarize this meeting from the conversations that are transcribed from the audio file will make a lot of people's jobs easier."

Dr. Liu, an assistant professor of computer science, joined UT Dallas in 2005 after completing postdoctoral work at the International Computer Science Institute in Berkeley, Calif. She received her Ph.D. in electrical and computer engineering from Purdue University in 2004.

She first became interested in speech and language processing as an electrical engineering undergrad at Tsinghua University in Beijing. Other research interests include spoken dialogue systems, natural language processing, and machine learning and data mining.

One of the challenges that Liu will try to overcome during the course of this NSF project is speech-recognition performance. A prepared speech, for instance, is much easier to transcribe via a speech-recognition program than a meeting would be. Conversational speech, mic placement, multiple speakers, interruptions, spontaneous style, and difficult topics are just some of the issues that make speech recognition of meetings more difficult.

Liu and her students will develop algorithms that can generate both generic summaries for a meeting or summaries specific to a user's query. Liu's approach to meeting summarization will be applicable to lectures,

legal and medical transcriptions, and voice mail summarization.

“There’s too much information out there,” she said. “We’re just trying to help people gain easier access to information.”

Provided by UT Dallas

Citation: Can't Make it to a Meeting? Send a Computer Instead (2009, August 6) retrieved 23 April 2024 from https://phys.org/news/2009-08-cant-make-it-to-a.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.