Department of Mathematical Sciences Colloquium

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How to Speak to Computers: Speech synthesis, speech recognition, and dialogue systems

Nowadays, the standard way to communicate with computers is through hardware peripheral devices like keyboards, mice, and similar. These user interfaces are more natural for computers than for people. Therefore it is desirable to develop new user interfaces which would make it possible to operate computers in a way that is more natural for us.

In this talk we introduce several basic problems of Natural Language Processing (NLP). Our focus is on the speech itself, especially on speech analysis and speech synthesis. We present basic approaches to speech synthesis and show the principles that are used in speech analysis. Basic problems of speech processing are described. The talk is concluded by an overview of dialogue systems: Modeling a dialog between user and computer, design of dialogue systems, and confirmation strategies used.

Friday, February 9, 2006 at 3 pm in Bell Hall 143
The University of Texas at El Paso

Refreshments will be served in front of the colloquium room, 15 minutes before the start of the colloquium.

For further information, please contact Dr. Pavel Šolín, Bell Hall 220. Phone: (915) 747-6770, email: `solin@utep.edu`.