IPRO 316

Improving Voice Recognition Prompts

Fall 2010

Background

- Voice recognition
- Hyperarticulation
- Talker characteristics

Problem and Goals

- Problem
 - Error prompts induce hyperarticulated speech
- Goals
 - Find characteristics within speech to prevent hyperarticulation

Team Structure

- Team Leader: Naomi Peterson
- Test Administration: Andy Bossemeyer, Robert Millonzi, Alex Webster, Nithin Winston
- Data Analysis: Vincent Echavarria, Shawn Gopal, Gabriel Klansky, Ruth Morrison

Pre-experiment

- What talker characteristics lead to the most intelligble speech?
- Collected and analyzed existing error prompts
- Testing 2 variables
 - Rate of Speech
 - Inflection
- Developed simulated speech recognition test

Experiment

- Recorded 80 participants over 6 days
- Pizza and raffle incentive
- Ethics

Results

- Compared pre-error and post-error speech
- Inconclusive for rate of speech
- Low inflection performed better than normal inflection
- Graph?
- Hyperarticulation?

Analysis

- Explanation of results
- Application of our results
- Possible changes for further IPROs

Questions?