

Human Subject Consent Form: Subjects With Dysarthria

“Audiovisual Distinctive-Feature-Based Recognition of Dysarthric Speech”

You are invited to participate in a University of Illinois research study that investigates the use of video data for automatic speech recognition. The investigators in this study are Mark Hasegawa-Johnson and Thomas Huang, professors in the Department of Electrical and Computer Engineering, Adrienne Perlman, a professor in the Department of Speech and Hearing Sciences, and Jon Gunderson, the Coordinator of Assistive Communication and Information Technology, Division of Rehabilitation Education Services, all at the University of Illinois at Urbana-Champaign. We are developing speech recognition software that uses both audio and video information in order to rapidly adapt to the speech of a new talker. In particular, we are interested in developing software that is capable of adapting equally well to talkers with dysarthria and to talkers without dysarthria. Dysarthria is a symptom of many different types of neuromotor impairments, and usually involves discomfort in speaking, reduced fluency, and/or reduced intelligibility. Human-computer interfaces for talkers with dysarthria are not as convenient as interfaces for talkers without dysarthria; one of the goals of this research is to develop better computer interfaces for talkers with dysarthria. In order to improve the ability of the system to adapt to new talkers, we are experimenting with simultaneous recordings that use four video cameras and eight microphones, all at the same time. In order to develop the speech recognition software, we need to collect audio and video recordings of human subjects like you.

If you decide to participate, we will video-tape (with audio) you while you read paragraphs, sentences, and isolated words from the screen of a personal computer. The complete recording session will last up to 2 hours. You will be compensated \$50 if you complete the entire recording session. If the experimenter cancels the recording session prior to completion because of equipment failure, or for any other reason, you will be paid \$20 per hour for the time that you actually participated. If you need to travel more than 10 miles in order to participate, your travel expenses will be reimbursed at a rate of \$0.44/mile. Parking at the Rehabilitation Center is free.

You will only be recorded while reading from the pre-printed prompt screens. If you make any spontaneous comments or conversation during the recording session, your spontaneous comments or conversation will be deleted prior to data analysis, publication, or distribution. By signing this form, you are giving your consent for audio and video recordings of your voice and face to be stored on a password-protected computer at the University of Illinois at Urbana-Champaign, and for the use of your recordings for the purpose of developing and testing speech recognition software. You may withdraw your consent at any time in the future. If you withdraw your consent, all video and audio recordings of you that are still present at the University of Illinois will be destroyed.

By initialing the appropriate boxes below, you may also specifically grant your consent for two other possible uses of your recordings. First, you may choose to allow us to play video and/or audio recordings of you for the benefit of listeners at a professional conference. Second, you may choose to allow us to give a CDROM containing video and/or audio recordings of you to interested researchers at other universities. If you are not completely comfortable with the idea that recordings of your voice and face could be distributed outside the University of Illinois, then you should not give us permission to do so. Your recordings are valuable and important to our research, here at the University of Illinois, even if you choose not to allow us to give your recordings to anybody outside the University of Illinois.

There are no known risks in this study beyond (1) the risk that you may not wish recordings of your voice and face to be distributed to researchers outside the University of Illinois, (2) the risk that you may get tired during the recording session. The experiment has designed to minimize both of these risks by giving you complete control over the recording session, and over the distribution of your recordings. During the recording session, you will be allowed to take a break at any time, in order to drink water, or walk around, or for any other reason. You will be asked to press a button prior to reading each prompt screen, and again as soon as you have finished reading each screen; if you wish to re-read a prompt screen, or take a break between any two prompt screens, it will be easy for you to do so. You will receive no specific benefit

from your participation in this study, other than monetary compensation. The University of Illinois does not provide medical or hospitalization insurance coverage for participants in this research study nor will the University of Illinois provide compensation for any injury sustained as a result of participation in this research study, except as required by law. The potential benefit to society of this research is the development of improved software for automatic audiovisual speech recognition. After completion of the study, a summary of research results will be made available to all participants upon request.

Please note that any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission. All video cassettes will be transcribed using a coded subject number so that no personally identifying information other than your image is on the cassettes. I will keep all cassettes in a locked file cabinet, and the digitized video files will be stored on a password-protected computer at the University of Illinois.

Your decision to participate, decline, or withdraw from participation will have no effect on your grades at, status at, or future relations with the University of Illinois. You are under no obligation to participate in the study. You are free to (a) discontinue participation in the study at any time, (b) request that the video recorder be turned off at any time, and (c) request that a recorded session be destroyed and excluded from the study. If you have any questions, please ask me. If you have any additional questions later, I will be happy to answer them. You can reach me (Dr. Hasegawa-Johnson) at room 2011, Beckman Institute, Mail-Code 251, 405 N Mathews, Urbana Illinois. My telephone number is 333-0925, and my e-mail address is jhasegaw@uiuc.edu. Should you have any questions concerning research subject's rights, you can contact the Institutional Review Board Office, (217) 333-2670; e-mail irb@uiuc.edu. You are welcome to call collect if you identify yourself as a research participant.

You are making a decision whether or not to volunteer. You must be at least 18 years old to sign this form and to participate in this research. Your signature indicates that you have read and understood the information provided above and have decided to participate. You may withdraw at any time after signing this form. You may keep the attached participant's copy of this form.

Signature of Participant

Date

Please answer the following questions by initialing either yes or no in response to each statement:

I grant the investigator permission to use excerpts of the **audio** recordings at **professional meetings and professional publications**. Any name or place references will be changed.

_____ Initials Yes

_____ Initials No

I grant the investigator permission to use excerpts of the **video** recordings at **professional meetings and professional publications**. Any name or place references will be changed.

_____ Initials Yes

_____ Initials No

I grant the investigator permission to **send a CDROM or DVDROM** containing **audio** recordings of my voice to scientific and engineering researchers at other laboratories or other universities who specifically request a copy of these recordings. Any name or place references will be changed.

_____ Initials Yes

_____ Initials No

I grant the investigator permission to **send a CDROM or DVDROM** containing **video** recordings of my face to reputable scientific and engineering researchers at other laboratories or other universities who specifically request a copy of these recordings. Any name or place references will be changed.

_____ Initials Yes

_____ Initials No