

## CSLU MEMBERSHIP AGREEMENT

Effective as of \_\_\_\_\_ (Effective Date), Oregon Health & Science University (hereinafter "OHSU"), having offices at 2525 SW 1<sup>st</sup> Ave, Suite 120, Portland, Oregon 97201, and \_\_\_\_\_ (hereinafter "Member"), having offices at \_\_\_\_\_ agree as follows:

### Part 1: Membership Privileges

1. The Center for Spoken Language Understanding (CSLU) will provide the following benefits to its Members for a period of three years from the Effective Date (\_\_\_\_\_ to \_\_\_\_\_):
  - 1.1. Access to Intellectual Property. The Agreement entitles Member to perpetual, nonexclusive, nontransferable, worldwide licenses to CSLU Software and Corpora (license terms defined in Part 2).
  - 1.2. Technical Support. Members can receive up to 10 hours of technical support on-site at CSLU and up to 5 hours of email and phone support related to Software and Corpora per year.
  - 1.3. Upgrades. Members will receive upgrades to SOFTWARE and CORPORA as they become available.
  - 1.4. Pre-prints of Publications. Members will receive advance copies of CSLU publications whenever possible. Preprints are typically available 4 to 6 months prior to published works.
  - 1.5. Graduating Student Resumes. Only a small number of students graduate each year with advanced degrees from centers of excellence in spoken language and understanding. Members will receive copies of resumes of graduating students. Whenever possible, CSLU will arrange meetings with students at conferences and other functions.
  - 1.6. Steering Committee. Members are invited to serve on CSLU's Steering Committee and receive early invitations to attend any meetings of the Advisory Board during the term of their Membership.
  - 1.7. CSLU Courses. Members can receive advanced notification of and advanced enrollment in CSLU Short Courses.
  - 1.8. Consulting. Members can request consulting services from CSLU faculty for individual projects. Consulting fees are not included in the Membership fees and are paid directly to the consultant.
  - 1.9. Research. CSLU conducts research in various areas of spoken language systems. Members can submit proposals for research to be conducted on behalf of the Member. Research fees for specific projects are not included in the Membership fees.

## **Part 2: License Agreement for Software and Corpora**

2. OHSU developed certain software at the Center for Spoken Language Understanding, referred to as "SOFTWARE" (specified in Appendix A), and has developed valuable intellectual property, known as "CORPORA" (specified in Appendix B), and desires to grant licenses to SOFTWARE and CORPORA in order that it becomes available for public use and benefit.
3. Subject to the terms and conditions of this Agreement, for the SOFTWARE:
  - 3.1. OHSU hereby grants to Member for internal use only a perpetual, nonexclusive, nontransferable, worldwide, license to:
    - 3.1.1. display and use SOFTWARE;
    - 3.1.2. make copies of the SOFTWARE as reasonably necessary for licensed use;
    - 3.1.3. make modifications to the SOFTWARE. Modifications include fixing bugs, making corrections to programming errors, and other minor alterations;
    - 3.1.4. create derivative work based on the SOFTWARE. Derivative work means work based upon the SOFTWARE where the SOFTWARE has been recast, transformed, adapted or revised.
  - 3.2. Member is granted the right to incorporate SOFTWARE, SOFTWARE modifications, or SOFTWARE derivative works into Member-created speech and language technology systems (SYSTEMS) to be distributed or sold, where SYSTEMS are defined as hardware and/or software including, but not limited to, systems for speech generation or speech recognition.
  - 3.3. The following restrictions apply to the SOFTWARE license.
    - 3.3.1. Member cannot sell or distribute SYSTEMS based solely on the SOFTWARE, SOFTWARE modifications, or SOFTWARE derivative works, but can incorporate the SOFTWARE into a greater product created by the Member.
    - 3.3.2. Member cannot include SOFTWARE source code in SYSTEMS to be distributed or sold. SYSTEM end users shall be governed by an end user license agreement, which prohibits the reverse engineering or de-compiling of the Software object code distributed.
    - 3.3.3. The licenses contained herein may not be sublicensed for use or distribution by a third party.
  - 3.4. The SOFTWARE has been developed as part of research conducted at OHSU. The SOFTWARE is experimental in nature and is made available "AS IS" without obligation by OHSU to provide accompanying services or support.
  - 3.5. SOFTWARE and accompanying information are licensed to Member, not sold. OHSU retains all rights not specifically granted, including ownership of SOFTWARE and all copyrights, trade secrets, and other intellectual property rights in SOFTWARE and accompanying information.
  - 3.6. Member agrees:
    - 3.6.1. To affix an appropriate copyright notice on all copies of the SOFTWARE licensed under Paragraph 3.
    - 3.6.2. To agree to acknowledge OHSU and the authors with appropriate citations in any publication or presentation containing research results obtained in whole or in part through the use of the SOFTWARE or in any derivative work.
    - 3.6.3. To exercise due care in protecting SOFTWARE from disclosure to third parties, at least to the degree it exercises care in protecting its own proprietary information.
4. Subject to the terms and conditions of this Agreement, for the CORPORA:
  - 4.1. OHSU hereby grants to Member for internal use only a perpetual, nonexclusive,

nontransferable, worldwide, license to:

- 4.1.1. use CORPORA in development activities, training, or testing of speech and language technology systems (SYSTEMS), where SYSTEMS are defined as hardware and/or software including, but not limited to, systems for speech generation or speech recognition;
- 4.1.2. make copies of the CORPORA as reasonably necessary for licensed use;
- 4.1.3. sell and distribute SYSTEMS developed, trained, or tested using the CORPORA.

4.2. The following restrictions apply to the CORPORA licence.

- 4.2.1. Member does not have the right to modify the CORPORA;
- 4.2.2. Member does not have the right to sell or distribute CORPORA;
- 4.2.3. Member does not have the right to include CORPORA or any part of the CORPORA in SYSTEMS for commercial sale or external use. CORPORA can only be used for internal development activities, training, and testing.
- 4.2.4. Member does not have the right to create a derivative work based on the CORPORA. Derivative work means work based upon the CORPORA where the CORPORA have been recast, transformed, adapted or revised.
- 4.2.5. The licenses contained herein may not be sublicensed for use or distribution by a third party.

4.3. The CORPORA has been developed as part of research conducted at OHSU. The CORPORA is experimental in nature and is made available "AS IS" without obligation by OHSU to provide accompanying services or support.

4.4. CORPORA and accompanying documentation are licensed to Member, not sold. OHSU retains all rights not specifically granted, including ownership of CORPORA and all copyrights, trade secrets, and other intellectual property rights in CORPORA and accompanying information.

4.5. Member agrees:

- 4.5.1. To affix an appropriate copyright notice on all copies of the CORPORA licensed under Paragraph 4.
- 4.5.2. To agree to acknowledge OHSU and the authors with appropriate citations in any publication or presentation containing research results obtained in whole or in part through the use of the CORPORA.
- 4.5.3. To exercise due care in protecting CORPORA from disclosure to third parties, at least to the degree it exercises care in protecting its own proprietary information.

### Part 3: General

5. Member agrees to pay to OHSU a non-creditable, non-refundable annual Membership fee in the amount of \_\_\_\_\_ (U.S. Dollars) each year. Member will pay the annual Membership fee within thirty (30) days from the date that this Agreement becomes effective and for years two and three, within thirty (30) days of the anniversary date.
6. Member shall indemnify and hold OHSU, its directors, trustees, officers, employees, students, fellows, agents, and consultants harmless from and against all liability, demands, damages, expenses, and losses, including but not limited to death, personal injury, illness, or property damage in connection with or arising out of (a) the use by or on behalf of Member, its sublicensees, directors, employees, or third parties of any rights licensed herein, or (b) the design, manufacture, distribution, or use of any materials or other products or processes developed in connection with or arising out of the rights licensed herein. Member at all times shall carry insurance or self-insurance sufficient to cover its contractual obligations with respect to activities performed under this Agreement. Member shall provide evidence of this coverage to OHSU upon written request by OHSU.
7. OHSU MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY SUBJECT MATTER LICENSED IN THIS AGREEMENT.
8. Termination.
  - 8.1. OHSU may terminate Membership and accompanying SOFTWARE and CORPORA licenses immediately without notice if Member fails to comply with the terms and conditions of this Agreement. Termination of this Agreement under Section 8.1 shall terminate all rights and licenses granted to Member related to SOFTWARE and CORPORA.
  - 8.2. OHSU may terminate this Agreement upon written notice to Member if conditions at OHSU preclude continuation of Membership. In the event of such termination, OHSU will remit to Member a portion of the Membership fee pro-rated by the date of the termination. Termination of this Agreement under Section 8.2 will not terminate rights and licenses granted to Member related to SOFTWARE and CORPORA. The perpetual licenses detailed in Part 2 will remain in place.
  - 8.3. Member may terminate Agreement effective on the following anniversary date of Membership upon written notice to OHSU at least 30 days prior to such anniversary date of Membership. Termination of this Agreement under Section 8.3 will not terminate rights and licenses granted to Member related to SOFTWARE and CORPORA. The perpetual licenses detailed in Part 2 will remain in place. Member will not receive any of the Membership benefits detailed in Part 1 of the Agreement.
9. If any provision of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality, and enforceability of the remaining provisions shall not be in any way affected or impaired.
10. The construction, validity, performance, and effect of this Agreement shall be governed by the laws of the State of Oregon.
11. This Agreement shall not be assigned by Member.
12. Member acknowledges that it is subject to and agrees to abide by the United States laws and regulations (including the Export Administration Act of 1979 and Arms Export Control Act).
13. All notices required or permitted by this Agreement shall be given by prepaid, first class, registered or certified mail properly addressed to the other Party at the address designated on the following Signature Page, or to such other address as may be designated in writing by such other Party, and shall be effective as of the date of the postmark of such notice
14. By entering into this Agreement, OHSU does not directly or indirectly endorse any product or service provided, or to be provided, by Member whether directly or indirectly related to this

Agreement. Member shall not state or imply that this Agreement is an endorsement by OHSU, or its employees. Additionally, Member shall not use the names or indicia of OHSU or its employees in any advertising, promotional, or sales literature without the prior written consent of OHSU with the exception of publication citations specified in Paragraph 3.6.

15. The Parties agree to attempt to settle amicably any controversy or claim arising under this Agreement or a breach of this Agreement. Thereafter, both parties agree that all disputes between them arising out of or relating to this Agreement, shall be submitted to non-binding mediation unless the parties mutually agree otherwise. All parties agree to exercise their best effort in good faith to resolve all disputes in mediation.
16. Paragraphs 6, 10, and 15 of this Agreement shall survive termination of this Agreement.
17. This agreement is null and void if not signed within 90 days of being downloaded or sent to Member by OHSU.

SIGNATURES ON NEXT PAGE

SIGNATURE PAGE

IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate originals by their duly authorized officers or representatives.

**FOR OHSU:**

By: \_\_\_\_\_  
Todd T. Sherer, Ph.D.  
Director, Technology and Research Collaborations

\_\_\_\_\_  
Date

Mailing Address for Notices and Payments:  
Technology and Research Collaborations  
Oregon Health & Science University  
2525 SW First Avenue, Suite AD120  
Portland, Oregon 97201-4753

**FOR Member:**

By: \_\_\_\_\_  
Signature of Authorized Official

\_\_\_\_\_  
Date

Printed Name \_\_\_\_\_

Title \_\_\_\_\_

Mailing Address for Notices:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Appendix A

### CSLU Toolkit Components

The CSLU Toolkit contains a large number of modules, most of which are covered by the license stipulations in the membership agreement. A number of modules we distribute are, however, either not owned by OGI or otherwise encumbered by license agreements. These modules are not covered by the CSLU membership agreement and are not licensed for commercial use. Parts of the CSLU Toolkit with these restrictions are marked in *italic typeface* below. Please contact our membership coordinator for further details.

In the listing below:

**C libraries** are pure C code (2.0/src/csluc in the Toolkit directory tree)

**C packages** are C code modules that add functionality to the Tcl shell (2.0/src/cslush/libs)

**Shell C libraries** are C code libraries shared by a number of "C packages" (2.0/src/cslush/pkg)

**Tcl packages** are Tcl script libraries that build on the above. (2.0/scripts)

**Applications** are Tcl script programs that build on all of the above (2.0/apps)

#### 1. Core functionality

Data encapsulation and transport  
container library

serialisation of C structs

architecture independent binary representation

memory management

Rtcl package, obj library

binds container library to the Tcl shell level

maps C structs to shell level handles

IO library

generic network routines, client/server implementation

directory server

- service browser

C libraries: auth, container, dballoc0, hash, result

Shell C libraries: dballoctcl, obj (source code not made available),

utils

C packages: Rtcl

Tcl packages: Io, Service

Applications: directory.tcl, snoopdir.tcl

Tcl Object system

provides data encapsulation and inheritance at the shell level

Shell C libraries: oo  
C packages: Thing  
Tcl packages: O

License manager, installation system  
Provides license keys to enable specific features  
Web based installation and software update

C libraries: flm (source code not made available)  
Shell C libraries: obj (source code not made available)  
C packages: License  
Tcl packages: Install, System  
Applications: update.tcl

Tcl utilities  
Command line argument parsing  
Signal handling  
Tk widgets

Shell C libraries: asn, cmds, utils  
C packages: Async, Misc, Subproc, Shortcut, Widgets, Zipchan

In and output  
IO libraries  
audio (speaker/microphone, telephony)  
TTS client interface  
Talking head client interface  
Festival interface  
OpenGL/Tcl bindings  
Wave library and package  
wave object manipulation

C libraries: wave  
Shell C libraries: wave  
C packages: Wave, Windows\_Audio, SunOS\_Audio,  
Linux\_Audio,  
Dialogic, OpenGL

### **1.1. Matrix manipulation**

shell level interface to various linear algebra packages  
memory management  
argument parsing

C libraries: mu  
Shell C libraries: mxparse  
C packages: Mx

## 2. Basic system components

CSLUhmm

HMM recognizer development environment

Training, evaluation, runtime

Viterbi decoder

Grammar search

C libraries: decoder, hmm, hsearch, hword, lmtree, mem,  
parser

C packages: Decoder, Hmm, Hsearch, Hword, Lmtree

Tcl packages: Hmm

Neural network subsystem

**Important note:** This package is available for commercial use on personal computers whether desktop or laptop, or any device that utilizes as operating systems Windows95, Windows98, Windows NT, Windows2000, and Apple Macintosh operating systems. Also, any components are available for commercial use on any device, provided that they are not assembled into a neural network subsystem. No other commercial use is allowed.

Neural network recognizer

Training, evaluation, runtime

Viterbi decoder

Grammar search and keyword spotter

C libraries: btheap, context, feature, garbage, logenergy,  
Nnrun, nntrain, opt, pick, prep, search, seg,  
seglst, tree, word

C packages: Backtrace, Context, Encode, Feature, Garbage,  
Lmtree, Nnrun, Nntrain, Pick, Prep, Search, Seg,  
Seglist, Tree, Word

Tcl packages: Digit, Force, Genrecog, Taskrecog, Training

### **2.1. Alphabet recognizer**

Finely tuned alphabet / digit telephone recognizer

Dictionary lookups

C libraries: abc

C packages: Abc

Tcl packages: Alphabet

Realtime audio support

pipelined speech onset and endpoint detection

new version of the speech detector - significant enhancements.

telephone echo cancellation

C libraries: sdet, sdet2, echo  
C packages: Sdet, Sdet2, Echo

3. Distributed parts of the CSLU Speech Toolkit

Rapid Application Developer (RAD)

base canvas objects

primary target: telephony

basic infrastructure

recognition, TTS, DTMF, alphabet recognition

*barge-in functionality*

additional DTMF functionality, including type-ahead

"Tucker Maxon" package

primary target: interactive use in a classroom setting

presentation of pictures and sounds

clickable maps

*"PSL" package*

*primary target: perceptual experiment design*

*experiment control structure (randomized trials etc.)*

*audio/visual stimulus presentation*

*response collection (through speech, mouse or keyboard)*

Speech Viewer

speech visualization and manipulation

Festival

*OGIresLPC enhancements*

*Baldi*

Toolkit integration done at OGI

*Fluent Rendering Engine and related toolkit wide materials*

*3D models*

*coarticulation modeling*

C libraries: *coart*  
C packages: *Coart, Morph*  
Tcl packages: *Morph*  
Applications: *Render*

*PROFER*

*Ed Kaiser's semantic parser*

*Video for Windows interface*

*experimental at best, works well with the Winnov Videum hardware*

*Phonetic alignment*

*Continuous generation and alignment of visemes with an audio stream.*

*C packages: Autolips*

*Simple script encryption*

*Encrypts Tcl scripts to protect intellectual property rights.*

*C packages: Esource*

*Avi capture*

*Generates Windows AVI movies from screen snapshots.*

*C packages: Avi*

## Appendix B

### CSLU Speech Corpora

#### INTRODUCTION

The Center for Spoken Language Understanding (CSLU) of the Oregon Graduate Institute of Science and Technology (OGI) collects and processes speech data for use in research and development of spoken language systems. This document describes both the corpora that are available from the CSLU and the corpora that are currently under development. In some cases a release of a corpus is available while CSLU is still developing the corpus for further releases.

**Table 1 - Available Corpora**

Corpus Name	Description
22 Language	Utterances from 22 languages and over 2000 speakers
Alphadigit	Alphanumeric strings from over 3000 speakers
Apple Words and Phrases	Repeated command and control phrases from 3000 callers
Cellular Words and Phrases	Words and phrases recorded from a cellular phone
FAE	Foreign accented English speech
Kids' Speech 1	1000 2 minute spontaneous utterances of kids grades 3-10
ISOLET	Isolated letters
Multi-Lang Telephone Speech	Utterances from 11 languages and over 2000 speakers
Names	30,000 spoken names
National Cellular 1	Cellular speech from about 190 speakers
Numbers	30,000 spoken numbers
Portland Cellular	Cellular speech from 425 callers
Speaker Recognition 1	12 Telephone calls from about 100 participants over 2 years
Spelled and Spoken Words	Spelled and spoken words from 4000 speakers
SR4X	36 speakers repeating 11 words 6 times on 4 channels
Stories	Continuous English utterances from 692 speakers
Yes/No Words	80,000 yes and no utterances

## **AVAILABLE CORPORA**

### **22 Language**

The 22 Language corpus consists of telephone speech from 22 languages: Eastern Arabic, Cantonese, Czech, Farsi, French, German, Hindi, Hungarian, Japanese, Korean, Malay, Mandarin, Italian, Polish, Portuguese, Russian, Spanish, Swedish, Swahili, Tamil, Vietnamese, and English. The corpus contains fixed vocabulary utterances (e.g. days of the week) as well as fluent continuous speech. The number of calls per language vary. Each utterance is verified by a native speaker to determine if the caller followed instructions when answering the prompts. A portion of calls in each language are transcribed phonetically and orthographically. See [3] for more information on the 22 Language corpus.

### **Alphadigit Strings**

The Alphadigit Strings corpus consists of utterances recorded over the telephone from 300 speakers. Each speaker will repeat several alphanumeric strings. The strings are defined so that every token pair (letters and digits) is represented and each token appears in an initial and final position. Each file has an orthographic transcription and some have phonetic transcriptions.

### **Apple Words and Phrases**

The Apple Words and Phrases corpus was developed with support from Apple Computer, Inc., who supplied the list of words and phrases to be collected. This telephone speech corpus contains about 21 hours of speech. 1000 calls were collected on an analog system and 2000 calls were collected on a digital system. Each caller repeated a list of command and control type phrases, for example "help". See [4] for more information.

### **Cellular Words and Phrases**

The Cellular Words and Phrases corpus is a cellular telephone speech corpus consisting of recordings of callers from cellular phones. The current release includes recorded utterances from 344 different callers and a transcription of each utterance. There are a total of 15,109 files, comprising about 7.6 hours of speech. See [4] for more information.

## **Foreign Accented English**

The Foreign Accented English corpus consists of 4925 telephone quality utterances from native speakers of 22 languages speaking English.

## **Kids' Speech 1**

This first of two releases of the Kids' Speech Corpus consists of over 1000 two minutes spontaneous utterances of children grades 3-10. Each utterance begins with the recitation of the alphabet. Orthographic transcriptions of each utterance are included.

## **ISOLET**

ISOLET is a database of letters of the English alphabet spoken in isolation. The database consists of 7800 spoken letters, 2 productions of each letter by 150 speakers. It contains approximately 1.5 hours of speech. The recordings were done under quiet, laboratory conditions with a noise-canceling microphone.

## **Multi-Language Telephone Speech**

The OGI Multi-Language Telephone Speech corpus consists of telephone speech from 11 languages: English, Farsi, French, German, Hindi, Japanese, Korean, Mandarin, Spanish, Tamil, and Vietnamese. The corpus contains fixed vocabulary utterances (e.g. days of the week) as well as fluent continuous speech. The current release includes recorded utterances from about 2000 speakers, for a total of about 23 hours of speech. Non-time-aligned orthographic transcriptions and time-aligned phonetic transcriptions are available for some of the utterances. See [8] for more information.

## **Names**

The 30,000 Names corpus is a collection of first and last name utterances taken from numerous CSLU telephone speech data collection efforts. Each file in the corpus has an orthographic transcription; about 7,000 have a phonetic transcription. Release 2.0 incorporates all of Release 1.0 and contains 24,000 files. See [2] for more information on the 30,000 Names corpus.

## **National Cellular 1**

This first of two releases of the National Cellular Corpus consists of cellular telephone speech from about 188 callers. The corpus contains fixed vocabulary and continuous speech utterances, such as responses to "what time is it now" or "talk about your dream home." The complete protocol is available at <http://cslu.cse.ogi.edu/corpora>. Each file has an orthographic transcription, and

many of the utterances have phonetic transcriptions. See [2] for more information on the National Cellular corpus.

## **Numbers**

The 30,000 Numbers corpus is a collection of spontaneous ordinal and cardinal numbers, continuous digit strings and isolated digit strings. The utterances are taken from numerous CSLU telephone speech data collection efforts and include phone numbers, birthdates, street addresses and zipcodes. Each file in the corpus has an orthographic transcription, and many have phonetic transcriptions. Release 1.0 contains 15,000 files. See [2] for more information on the 30,000 Numbers corpus.

## **Portland Cellular**

The Portland Cellular corpus consists of cellular telephone speech from about 425 callers from the Portland, Oregon metropolitan area. The corpus contains fixed vocabulary and continuous speech utterances. There are approximately 8000 utterances, each with an orthographic transcription. In addition, approximately 200 30-second continuous speech utterances have been phonetically transcribed. See [2] for more information on the Portland Cellular corpus.

## **Speaker Recognition 1**

This first of three releases of the Speaker Recognition corpus (formerly known as Speaker Verification), consists of telephone speech from 100 participants. Each caller participated in 12 sessions over a 2-year period. The participants answered questions such as "what is your eye color" or responded to prompts like "describe a typical day in your life." The complete protocol is available at <http://cslu.cse.ogi.edu/corpora>. Every file has an orthographic transcription.

## **Spelled and Spoken Words**

The Spelled and Spoken Words corpus consists of speech from over 4000 callers prompted to spell their first and last names, and to say their full name, what city they grew up in, what city they're calling from, and to answer two yes/no questions. In order to collect sufficient instances of each spoken letter, about 1000 callers also recited the English alphabet with pauses between the letters. Each call was transcribed by two people, and all differences were resolved. In addition, a subset of the calls has been phonetically labeled. See [7] for more information on the Spelled and Spoken Words corpus.

## **SR4X**

The SR4X corpus is useful for speaker recognition research. The data were collected over four different telephone channels, including speaker phone and

carbon button microphone. About 35 subjects participated, each repeating the vocabulary words six times per session.

### **Stories**

The Stories corpus consists of extemporaneous English speech produced by 692 different callers (about 10 hours). The "stories" were collected during the OGI multi-language corpus data collection, which produced 692 complete calls by English speaking callers. At the end of the protocol, callers were asked to talk about any topic for one minute. These one minute monologues are referred to as "stories". Each story was transcribed at the non-time-aligned word-level. 322 stories were transcribed at the word level with time-alignment markers, and 210 stories were phonetically labeled. See [4] for information on the Stories corpus.

### **Yes/No Words**

The Yes/No Words corpus is a collection of naturally produced yes and no utterances, including colloquial utterances such as "yep" or "nope." The utterances are taken from numerous CSLU telephone speech data collection efforts. Each file has an orthographic transcription and an automatically produced phonetic transcription. Release 1.0 contains only "yes" or "no" utterances; later releases will contain "yep" and "nope" and other colloquial utterances. Release 1.0 contains 20,000 files.

## CORPORA PUBLICATIONS

Note: All of the following publications are available online from:  
<http://cslu.cse.ogi.edu/publications>

1. Lander, T. and S. T. Metzler, "The CSLU Labeling Guide," update to Technical Report No. CSLU-003 of Feb. 4, 1994. (Readers should be aware that this is a continuously evolving document.)
2. Cole, R. A., M. Noel, T. Lander, and T. Durham, "New Telephone Speech Corpora At CSLU," Proceedings of Eurospeech 1995, Madrid, Spain, 1995.
3. Lander T., R. A. Cole, B. T. Oshika, and M. Noel, "The OGI 22 Language Telephone Speech Corpus," Proceedings of Eurospeech 1995, Madrid, Spain, 1995.
4. Cole, R. A., M. Fanty, M. Noel and T. Lander, "Telephone Speech Corpus Development at CSLU," Proceedings of the 1994 International Conference on Spoken Language Processing, Yokohama, Japan, Sept. 18-22, 1994
5. Cole, R. A., B. T. Oshika, M. Noel, T. Lander and M. Fanty, "Labeler Agreement in Phonetic Labeling of Continuous Speech," Proceedings of the 1994 International Conference on Spoken Language Processing, Yokohama, Japan, Sept. 18-22, 1994.
6. Cole, R. A., M. Noel, D. C. Burnett, M. Fanty, T. Lander, B. Oshika and S. Sutton, "Corpus development activities at the Center for Spoken Language Understanding," Proceedings of the ARPA Workshop on Human Language Technology, April 7-11, 1994.
7. Cole, R. A., M. Fanty and K. Roginski, "A Telephone Speech Database of Spelled and Spoken Names," Proceedings of the International Conference on Spoken Language Processing, Banff, Alberta, pp. 891-893, Oct. 12-16, 1992.
8. Muthusamy, Y. K., R. A. Cole and B. T. Oshika, "The OGI multi-language telephone speech corpus," Proceedings of the International Conference on Spoken Language Processing, Banff, Alberta, Oct. 12-16, 1992.