

## National and International Contacts



Our contacts with other research institutions in Sweden and internationally are well developed. Of major importance in this respect is our scientific journal, the TMH-QPSR, which has been published on-line since January 2001. Abstracts from the contributions in 2003, Volume 44, are included in this report.

We have several guest researchers staying half a year or longer, and we participate in a substantial number of international symposia, conferences, and workshops, as listed in the following sections.

### Speech group

The Speech group is engaged in European co-operation within the COST-program (European Co-operation in the Field of Science and Technical Research) in the projects:

- COST 275 - Biometrics-Based Recognition of People over the Internet
- COST 278 - Spoken Language Interaction in Telecommunication.

During 2003 we have also been part of several European projects, such as

- *SpeeCon*
- *MultiSense*
- *PF-Star*
- *Dumas*
- *WWAAC*
- *Synface*
- *OLP*

The last two in co-operation with the Hearing Technology group.

During 2003, CHIL - Computers in the Human Interaction Loop, was accepted as an Integrated Project in the EU 6<sup>th</sup> Framework.

We take part in co-operation between the Nordic countries both in formal projects like MUMIN, NordTalk and VISPP funded by NorFA, the Nordic Academy for Advanced Study. We have close contacts with the

Universities in Aalborg, Trondheim and Helsinki. The annual Nordic meeting has now become a tradition where the TMH researchers meet speech researchers from these universities. The department hosted the 2003 meeting in Stockholm.

The department is the Swedish managing node for *Elsnet*, the EU-sponsored European Network for Language and Speech Research.

Another exponent of increased European co-operation in the speech research area is *ISCA* (International Speech Communication Association), where we are represented on the board.

Outside Europe, we have contacts with several groups on a non-formal basis. Exchanges of students, guest researchers, shorter visits, and exchange of reports is the normal mode of operation. Of special interest is the long-lasting close contact with speech researchers at *MIT*, USA, and the increased contacts with *ATR*, Japan.

In the context of *ISAAC* (International Society for Augmentative and Alternative Communication), we have been very active, having had a member on the board of both the international organisation and the Swedish chapter.

We have an important role in extending interdisciplinary contacts within Sweden, e.g., through almost weekly demonstrations, lectures, and open-house activities for schools and professional organisations. The sequence of *Bullet* courses, organized by CTT, has been a good way let internationally well-known speech researchers share their knowledge and experiences.

Within *GSLT*, The Swedish Graduate School of Language Technology, founded in 2001, we cooperate with the leading centres of research and teaching in language technology in Sweden. Several of our graduate students are part of *GSLT*.

Contacts with Linköping University have been active, with joint education in speech technology and projects on spoken dialogue modelling and multi-modal speech synthesis.

The two projects “Gräns och gruppering” together with Umeå University, supported by VR and “Modelling Interactive Language Learning” together with Stockholm University, supported by RJ are examples of joint projects within Sweden supported by national grants.

We have also close technical and scientific contacts with

- Babel Infovox AB, which markets speech technology products based on our research and development
- The research department of TeliaSonera
- Rehabmodul AB
- HoneySoft

Within CTT we have during 2003 had formal co-operation with the following companies and organisations:

- ABB Automation Technology Products
- Babel Infovox AB
- Flextronics Design
- Hjälpmedelsinstitutet
- HoneySoft
- Just Direct
- Phoneticom
- PipeBeach AB
- Polycom Technologies AB
- SAAB
- SAAB Tech Systems
- Sveriges Radio AB
- Sveriges Television AB
- Telia Research AB
- Vattenfall AB
- Voxi AB

## Music group

Research has been performed together with the following institutions:

- Abteilung für Phoniatrie und Pädaudiologie, Medizinische Fakultät der Humboldt-Universität zu Berlin, Universitäts-Klinikum Charité, HNO-Klinik, Germany
- Hochschule Musik und Theater, Zurich, Germany
- Institut für Stimmforschung, Hochschule für Musik, Dresden, Germany
- Austrian Research Institute for Artificial Intelligence, Vienna, Austria

- Vanderbilt Voice Center, Nashville, USA
- Institute of Education, University of London, United Kingdom
- Department of Musicology, University of Tartu, Finland
- Det Jyske Konservatorium, Aarhus, Denmark
- Division of Phoniatics, Bispebjergs Hospital, Copenhagen, Denmark
- Norwegian Academy of Music, Oslo, Norway
- Division of Experimental Mechanics, Luleå Technical University, Sweden
- Department of Psychology, Uppsala University, Sweden
- Department of Linguistics, Stockholm University, Sweden
- Department of Logopedics and Phoniatics, Huddinge University Hospital, Sweden

## Hearing Technology group

The Hearing Technology group is engaged in European co-operation as a full partner within OLP (Ortho-Logo-Pedia). The OLP project is co-ordinated by the Institute for Language and Speech Processing, Athens, Greece, with participants from France, Greece, Spain, Sweden, and the U.K. We have a close co-operation with the National Acoustic Laboratories (NAL) in Sydney and also maintain an exchange program with AG Medizinische Physik at the University of Oldenburg.

We have close contacts with the hearing-instrument industry. GN Resound has supported some of our work on signal processing algorithms for hearing aids.

We co-operate with Swedish hearing clinics and with all educational programmes for clinical general audiologists in Sweden. We participate in teaching and research supervision related to signal processing in hearing aids and methods for the fitting and evaluation of personal aids for hearing-impaired persons. We also co-operate with teachers at schools for the deaf concerning methods for speech training. Prof Arne Leijon is president of the Swedish Association for Technical Audiology. Prof Arne Leijon is president of the Swedish Association for Technical Audiology.