

Oregon Graduate Institute

Anthropic Signal Processing Group

Head

Hynek Hermansky

Professor of Electrical and Computer Engineering, and
Senior Research Scientist at the International Computer Science Institute

Dr. Eng. degree from the University of Tokyo.

Working in speech processing for over 20 years, previously as a Research Fellow at the University of Tokyo, a Research Engineer at Panasonic Technologies in Santa Barbara, California, and as a Senior Member of Research Staff at US WEST Advanced Technologies.

Main Research Areas

- Acoustic processing (front-end) for speech and speaker recognition in realistic communication environments
- Improvements of quality and intelligibility of speech

Current Directions in Research

- Human-like speech processing
- Utilizing medium-term (syllable-level) dynamics
- Deriving reusable knowledge from large speech databases

Recent Contributions

- Data-driven RASTA processing
- Multi-stream ASR
- TempoRAI Pattern classifier (TRAP)
- Data-trained nonlinear feature mapping

Recent Projects

- Speaker ID - for the past three years among leaders in NIST evaluations
- ETSI cellular industry standards initiative (Aurora)
 - currently the best performing system

Recent Ph.D. Graduates

Carlos Avendano (UC Davis with Alghazi and Duda)

Sarel van Vuuren (SpeechWorks)

Sangita Sharma (Intel Oregon)

Current ASP group at OGI

4 graduate students, 1 research staff, working closely at OGI with Misha Pavel (psychoacoustics), with nonlinear processing group (Leen, Moody, Yang...) and with CSLU.

Research Support

About \$600K a year

Main current sponsors DoD, NSF, Intel

Main External Collaborations

ICSI, Berkeley (Morgan, Ellis, Greenberg...)

IIT, Madras, India (Yegnanarayana)

Other Collaborations

IDIAP Martigny, Switzerland (Bourlard)

Technical University Brno, Czech Republic (Cernocky)

CSLP Johns Hopkins (Byrne, Jelinek)

Further Information

<http://www.asp.ece.ogi.edu/>