2009 Winter School on Speech and **Audio Processing** 



The focus of the Winter School on Speech and Audio Processing - 2009 (WiSSAP-09) is on Speaker and Language Recognition. The recognition of speakers, languages, accents, and dialects is fast becoming one of the central problems for speech researchers around the world. On the first day of the School, lectures given by eminent researchers from within India will cover the fundamentals of these topics. Over the next three days, invited overseas speakers will cover in depth the theory, applications and practical aspects of building state-ofthe-art Speaker and Language-ID systems. In addition, there will be evening sessions for presentations from sponsors, interaction with experts and discussions on open problems in this area.

WiSSAP-09 is targeted mainly towards post-graduate students, faculty in educational institutions and Scientists/Researchers in Research Labs/Industry.

About WiSSAPs: The series of Winter Schools on Speech and Audio Processing provides a regular forum for research students, faculty and R&D engineers working in these areas to enhance their background, and get exposed to intricate research aspects. The schools work on a non-profit basis and hope to provide a platform for a qualitative exchange of ideas for utilizing speech technology in Indian Context. WiSSAP-09 is the fourth one in the series, following the very successful WiSSAP-06, WiSSAP-07 and WiSSAP-08.

# Speaker and Language Recognition

09-12 January 2009

**Outreach Auditorium** 

Indian Institute of Technology Kanpur Kanpur (U.P.) 208016, INDIA http://www.iitk.ac.in/wissap09

#### Organized by



Supported by







### INTERNATIONAL SPEAKERS

JIRI NAVRATIL: He is a Research Staff Member in the Human Language Technologies Department at IBM Research, USA. He is currently involved in research efforts in the area voice-based authentication technologies, particularly in developing algorithms for acoustic speaker modeling, verification and identification and for joint use of conversational and biometric technologies to achieve robust speaker authentication. Dr. Navratil is a recipient of the 1999 Johann-Philipp-Reis prize for outstanding contributions to the field of language recognition. He has also received multiple invention achievement awards and a technical group award from IBM and served as the Watson chair of the User Interface Technologies interest area in 2004-2006.

ANDREAS STOLCKE: He is a Senior Research Engineer at the Speech Technology and Research Laboratory, SRI International, Menlo Park, CA, and at the International Computer Science Berkeley. His research Institute, interests are in applying novel modeling and learning techniques to speech recognition, speaker identification and natural language processing. He is also the author of a widely used open-source toolkit for statistical language modeling – SRILM toolkit. Dr. Stolcke has been on the editorial Board of Computer, Speech and Language, IEEE Transactions on Audio, Speech And Language Processing & Computational Linguistics.

FREDERIC BIMBOT: He is heading the METISS Research Group at IRISA, dedicated to selected topics in speech and audio processing. He is a Research Fellow at French National Center for Scientific Research (CNRS). He has also been a Visiting Researcher at AT&T Bell Laboratories between 1990 and 1999. He has worked in several European projects: SPRINT (speech recognition using neural SAM-A (assessment networks), methodology), and DiVAN (audio indexing). He has also been the workpackage Manager of research activities on speaker verification, in the projects CAVE, PICASSO, and BANCA. Dr. Bimbot was Chairman of the Groupe Francophone de la Communication Parlée (now AFCP) from 1996 to 2000 and a member of the International Speech Communication Association Board (ISCA) from 1998 to 2003.

### **Tutorials**

Tutorial 1	Speaker Recognition	Date/Time	09:00-10:30	10:30-11:00	11:00-12:30	12:30-13:30	13:30-15:00	15:00-15:30	15:30-17:00
Tutorial 2	Language Identification								
Tutorial 3	SVMs		Tutorial 1		Tutorial 2		Tutorial 3		Tutorial 4
Tutorial 4	GMMs	09-01-09 Fri	V. Ramasubramanian	Tea	Hema A. Murthy	Lunch	C. Chandra Sekhar	Tea	K. Samudravijaya
Advanced Topics		Fundamentals	Siemens CT		IIT-M		IIT-M		TIFR
J. Navratil (J.N)	Acoustics & Phonotactics Accent/ Dialect Detection	10-01-09 Sat Adv. Topics	F. Bimbot (GMM-UBM)	Tea	A. Stolcke (Higher Level Features)	Lunch	J. Navratil (Overview (LID))	Tea	F. Bimbot (System Norm.)
A. Stolcke (A.S)	Higher Level Features, SVMs, Phonotactics, MLLR	11-01-09 Sun Adv. Topics	J. Navratil (Acoustics in LID)	Tea	A. Stolcke (Basic Phonotactics)	Lunch	F. Bimbot (Application of SID)	Tea	J. Navratil (Phonotactics LID)
F. Bimbot (F.B)	System Normalization, Speaker Indexing and Diarization, and Speaker Recognition in Forensics	12-01-09 Mon Adv. Topics	A. Stolcke (MLLR)	Tea	F.B /J.N /A.S (Databases, Evaluation & Software)	Lunch	Open Problem Discussion		

### **Sponsors**





LatticeBridge

PRABHU GOEL

Research Center

IIT Kanpur





Microsoft<sup>®</sup>



## **Program Committee**

S. Umesh, IIT Kanpur Hema A. Murthy, IIT Madras C. Chandra Sekhar, IIT Madras T. V. Sreenivas, IISc Bangalore V. Ramasubramanian, Siemens CT India K. Samudravijaya, TIFR Mumbai Preeti Rao, IIT Bombay Arun Kumar, IIT Delhi C. S. Ramalingam, IIT Madras

### **Local Organizing Committee**

S. Umesh, IIT Kanpur Rajesh Hegde, IIT Kanpur P. Sircar, IIT Kanpur D. R. Sanand, IIT Kanpur S. P. Rath, IIT Kanpur A. K. Sarkar, IIT Kanpur

### **Registration Details**

**Tentative Program Schedule** 

### Registration Fee

	ISCA/IEEE* Member (Rs.)	Non ISCA/IEEE Member (Rs.)
Industry Delegates	4000	4500
Academic/Faculty	3000	3300
Student**	1500	1750

\*ISCA/IEEE members must indicate membership number and validity period. \*\*Attach a copy of student ID-card or letter from the head of the department.

For Online Deposit

IFS: **SBIN0001161** SWIFT: SBININBB499 A/C No: 30554970316 For Draft Payment

In favour of "WISSAP-09", payable at SBI, IIT Kanpur (Bank Code No: 1161)

Last Date for registration: 20 December 2008

### **Mailing Address**

17:00-17:30

Break

Break

Break

17:30-19:00

LAB Session

Industry

Presentation

Q&A

with experts

WISSAP - 2009 Dept. of Electrical Engineering Indian Institute of Technology Kanpur Kanpur (U.P.) 208016, INDIA Phone: +91 - 512-2597164, 2597846 Fax: +91-512-2590063

Email: wissap09@iitk.ac.in http://www.iitk.ac.in/wissap09

### Accommodation

Registration fee does not include accommodation. A limited number of shared double rooms are available for non-student participants at Visitors' Hostel (IITK) on campus. Students will be accommodated in hostels. Room rates and other details are available on the WiSSAP webpage.