

## 2009 Winter School on Speech and Audio Processing



### Speaker and Language Recognition

09-12 January 2009

Outreach Auditorium

Indian Institute of Technology Kanpur  
Kanpur (U.P.) 208016, INDIA

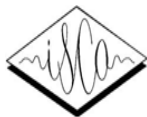
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The focus of the **Winter School on Speech and Audio Processing - 2009 (WiSSAP-09)** is on Speaker and Language Recognition. The recognition of speakers, languages, accents, and dialects is fast becoming one of the central problems for speech researchers 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-of-the-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.

### 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 of 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 Institute, Berkeley. His research 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 networks), SAM-A (assessment methodology), and DIVAN (audio indexing). He has also been the work-package 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.

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**09-12 January, Outreach Auditorium, IIT Kanpur, UP 208016**

**Tutorials**

<b>Tutorial 1</b>	Speaker Recognition
<b>Tutorial 2</b>	Language Identification
<b>Tutorial 3</b>	SVMs
<b>Tutorial 4</b>	GMMs

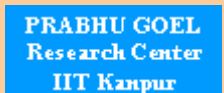
**Advanced Topics**

<b>J. Navratil (J.N)</b>	Acoustics & Phonotactics Accent/ Dialect Detection
<b>A. Stolcke (A.S)</b>	Higher Level Features, SVMs, Phonotactics, MLLR
<b>F. Bimbot (F.B)</b>	System Normalization, Speaker Indexing and Diarization, and Speaker Recognition in Forensics

**Tentative Program Schedule**

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	17:00-17:30	17:30-19:00
09-01-09 Fri <b>Fundamentals</b>	<b>Tutorial 1</b> V. Ramasubramanian Siemens CT	Tea	<b>Tutorial 2</b> Hema A. Murthy IIT-M	Lunch	<b>Tutorial 3</b> C. Chandra Sekhar IIT-M	Tea	<b>Tutorial 4</b> K. Samudravijaya TIFR	Break	LAB Session
10-01-09 Sat <b>Adv. Topics</b>	F. Bimbot (GMM-UBM)	Tea	A. Stolcke (Higher Level Features)	Lunch	J. Navratil (Overview (LID))	Tea	F. Bimbot (System Norm.)	Break	Industry Presentation
11-01-09 Sun <b>Adv. Topics</b>	J. Navratil (Acoustics in LID)	Tea	A. Stolcke (Basic Phonotactics)	Lunch	F. Bimbot (Application of SID)	Tea	J. Navratil (Phonotactics LID)	Break	Q & A with experts
12-01-09 Mon <b>Adv. Topics</b>	A. Stolcke (MLLR)	Tea	F.B /J.N /A.S (Databases, Evaluation & Software)	Lunch	Open Problem Discussion				

**Sponsors**



**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**

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**

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<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.