

Image Processing and Applications Laboratory (ipal.imag.fr)

Laboratoire pour le Traitement des
Images et ses Applications



Institute for
Infocomm Research



CENTRE NATIONAL
DE LA RECHERCHE
SCIENTIFIQUE



IPAL - Overview

- ▶ Joint Laboratory created the April 18th 2000
- ▶ CNRS presence in Singapore since 1997



SoC



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Scientific Themes

- ▶ Axis 1 : Image Processing
- ▶ Axis 2 : Perception of 3D vision
- ▶ Axis 3 : Multilingual analysis & retrieval

Scientific Activities : axis 1

- ▶ Indexing and Retrieval of Still Images and Videos
 - DIVA Project : 01/2000 → 07/2003
 - SnapToTell Project : 2004
- ▶ Collaboration
 - NUS: M. Kankahalli, W-K. Leong, T-S. Chua, K-L. Tan, H. Abdulredha, S. H. Srinivasan
 - I2R: J-K. Wu, T. Tan, J-H. Lim, Tian Qi
 - CNRS: P. Mulhem, G. Quénot (CLIPS-Grenoble)

Scientific Activities : axis 2

▶ Vision and 3D Visual Perception

- Visual Processing of Optic Flow: Functional Properties and Neural Bases
- French researcher in Singapore until February 2002: Dr. V. Cornilleau-Pérès

▶ Collaborators

- SERI (Singapore Eye Research Institute): Pr S.J. Chew, Pr V. Balakrishnan, Pr Donald Tan
- NUS (Electrical and Computer Engineering): Dr L. F. Cheong
 - Students: T.K. Wang, H. Zhong, C.H. Peh, L.C. Tai, G.M. Yeow, T.P. Lim.
- Singapore Polytechnic / SERI: Dr A. Carkeet
- NUH (Ophthalmology, Orthopaedy): Pr P. Chew, Pr J. Goh
 - Student: Dr N. Shabana
- FRANCE
- LPPA: Pr Berthoz, Dr Droulez, Dr Panerai, Dr A.L. Paradis
- Orsay Hospital (France): Pr D. Le Bihan

Scientific Activities : axis 3

- ▶ Participation to CLEF 2004
- ▶ Starting to work on Medical data
 - Use of the CasImage data set
 - Description in English & French

IPAL RESULTS

- ▶ Well established Joint Lab for more than 4 years
 - Support from NUS/CNRS/I2R, the French Foreign Affairs Minister, and Grenoble I University (UJF)
 - Strong links with several laboratories in France
- ▶ Agreements
 - Memorandum of Understanding en 2001 between UJF and NUS
 - In 2002 non-graduating exchange agreement between UJF and NUS
- ▶ Visits & exchanges :
 - students to/from Singapore : 5 Master students.
 - Co-supervision of Master Students in DIVA : 7
 - Visits of researchers from/to Singapore : 8
 - 2 French PhD long-term visits (> 6 months) from CLIPS-IMAG (Grenoble),
- ▶ Scientific production: successful
 - More than 75 publication in international conferences and journals

- ▶ Research : from “image” to “information”
 - Axis 3 : ISERE
 - Axis 2 : PICS (Dr. Cornilleau-Pérès).
 - Future : Join cooperation project with Vietnam (MICA), PICS ASPIRIN

- ▶ CNRS presence in Singapore in the future
 - End of agreement for IPAL in march 2004. Renewal of the agreement in process