**Personal information**: Alice CAPLIER, permanent researcher at the LIS (Image and Signal Laboratory) Lab of Grenoble, France

#### **Education:**

1991 : graduated from Ecole Nationale Supérieure des Ingénieurs électriciens de Grenoble.

1992 : DEA signal image speech from the National Polytechnical Institut of Grenoble

1995 : Phd from the National Polytechnical Institut of Grenoble at LTIRF laboratory

(Subject: MRF model from motion detection in image sequences: spatio-temporal approach and real time implementations)

### Research experience (field + short summary of work done):

I am working in the field of human behaviour analysis and interpretation. In particular, my works concern the analysis and recognition of facial expressions analysis, of the rigid and non rigid head movements involved in the non verbal communication process, of global human postures and of Cued Speech gestures (gestures involved in the communication process with hard of hearing people). The developed approaches consist in a first step of low level information extraction in video sequences and in a second step of information fusion based on the belief theory.

# Main Publications (in relation with the workshop themes):

GIRONDEL V., CAPLIER A., BONNAUD L., ROMBAUT M., "Belief theory-based classifiers comparison for static human body postures recognition in video", International Journal of Signal Processing IJSP, Vol. 2, n°1, pp-29-33, 2005.

EVENO N., CAPLIER A., COULON P.Y. - Automatic and Accurate Lip Tracking. *IEEE Transactions on Circuits and Systems for Video technology* . Vol.14, N°.5, may 2004, pp.706-715.

HAMMAL Z., COUVREUR L., CAPLIER A., ROMBAUT M. –Facial expression recognition based on the belief theory: comparison with different classifiers.– 13<sup>th</sup> ICIAP, Cagliary, Italy, September 2005.

HAMMAL Z., BOZKURT B., COUVREUR L., UNAY D., CAPLIER A., DUTOIT T. - Quiet versus agitated: vocal classification system- *EUSIPCO2005*, Antalya, Turkey, September 2005

BENOIT A., CAPLIER A.- Motion Estimator Inspired from Biological Model for Head Motion Interpretation. - *WIAMIS*, Montreux, Suisse, April 2005 BENOIT A., CAPLIER A. - Motion Head Nods analysis: interpretation of non verbal communication gestures - *ICIP2005*, Genova, Italy, September 2005

GIRONDEL V., BONNAUD L., CAPLIER A., M. ROMBAUT - Real Static Human Body Posture Recognition in Video Sequence Using the Belief Theory. - *ICIP2005*, Genova, Italy, September, 2005

BENOIT A., CAPLIER A. - Biological Approach for Head Detection and Analysis - *EUSIPCO2005*, Antalya, Turkey, September 2005.

CAPLIER A., BONNAUD L., MALASSIOTIS S., STRINTZIS M. - Comparison of 2D and 3D Analysis For Automated Cued Speech Gesture Recognition – SPECOM, St Petersbourg, Russia, September 2004.

HAMMAL Z., CAPLIER A. - Eyes and eyebrows parametric models for automatic segmentation

-IEEE Southwest Symposium on Image Analysis and Interpretation, USA, March, 2004.

GIRONDEL V., CAPLIER A., BONNAUD L. - Real Time Tracking of Multiple Persons by Kalman Filtering and Face Pursuit for Multimedia Applications *IEEE Southwest Symposium on Image Analysis and Interpretation*, USA, March, 2004.

# Skills I can bring to the eNTERFACE projects:

Facial expressions recognition, head motion analysis, yawing and blinking analysis, gaze estimation

#### Other activities and Hobbies:

Sports: mountain bike, orienteering, mountaineering, skiing,