

CURRICULUM VITAE

PERSONAL DETAILS

NGUYEN Huu Giao

Vietnamese, 30 year old, male, married

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EDUCATIONAL BACKGROUND

- 12/2008-10/2011 PhD student in **Computer Science and Signal Processing**
Institute Telecom/Telecom Bretagne, University Rennes I, France.
(Highest honors – Très Honorable)
- 2006-2008 MSc. student in **Computer Science and Applied Math**
University of La Rochelle & Institute Informatics of Francophone.
- 2000-2004 Undergraduate student in **Computer Science.**
University Natural Science of HCM city, Vietnam.

WORKING & RESEACH ACTIVITIES

- 01/11/11 Project I-VP: Intuitive Vision Programming at MISTIS Team – INRIA
Grenoble
Themes: Exploit more intensively statistical and image processing techniques to
improve defect detection capability and programming time based on existing AOI
(Automated Optical Inspection) principles
Methods: image descriptor: co-occurrence matrix, multi-fractal spectrum;
machine learning : local outline factor, random forest.
Collaborations: VI Technology
- 12/2008-
10/2011 Project CARTSON (Europole Mer) - PhD at Telecom Bretagne, France
Themes: Spatial statistics of visual keypoints (and visual elementary sharps) for
texture (and scene) classification and recognition; application to underwater sonar
images for the sea's cartography.
Methods: log-Gaussian Cox processes, keypoint detections and descriptions,
level line, shape context, image classification and segmentation.
Collaborations: Ifremer Brest.
- 3/2008-9/2008 Project BQR - Research engineer in ADAGIO team - INRIA, Lorraine
Themes: Discrete contour extraction from reference curvature function;
application to MRI of human brain for diagnosis of Parkinson's disease.
Methods: discrete curvature estimator, image segmentation: Live-wire, enhanced
lane, shortest path algorithm.
Collaborations: LaBRI-University of Bordeaux 1, LAMA-University of Savoie
- 2004-2006 Industry engineer - Software developer at Silicon Design Solutions Corp.
Description: Code generating for test-chip components using Java and Perl.

LINGUISTIC AND COMPUTER SKILLS

- Linguistic English, French
- Computer skills C++, Matlab, Java, Perl, Unix script.
Computer vision tools: OpenCV, Megawave.
Mics: Latex, UML design.
- Mathematics Spatial statistical analysis, discrete mathematics, fuzzy logic.

MICS

Teaching assistant, C++ programming (MSc. degrees, Telecom Bretagne)

Reviewing activities: Pattern recognition, Canadian Conference on Electrical and Computer Engineering 2011.

REFERENCES

Ronan Fablet, associate professor Telecom Bretagne, ronan.fablet@telecom-bretagne.eu

Jean-Marc Boucher, professor Telecom Bretagne, jm.boucher@enst-bretagne.fr

Florence Forbes, HDR, Head of Mistis team, INRIA Grenoble florence.forbes@inria.fr

Bertrand Kerautret, associate professor UHP, IUT St Dié, bertrand.kerautret@loria.fr

PUBLICATIONS

1. **H.-G. Nguyen**, R. Fablet, A. Ehrhold, J.-M. Boucher. "Keypoint-based analysis of sonar images: application to seabed recognition." *IEEE Transaction on Geoscience and Remote Sensing, TGRS 2012*, Vol.50(4), pages 1171-1184. [[pdf](#)]
2. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Multivariate log-Gaussian Cox models of elementary shapes for recognizing natural scene categories". **ICIP2011**, pages 665-668. [[pdf](#)]
3. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Visual textures as realizations of multivariate log-Gaussian Cox processes." **CVPR'2011**, pages 2945–2952. [[pdf](#)]
4. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Log Gaussian Cox Processes of visual keypoints for sonar texture recognition." **ICASSP'2011**, pages 1005-1008. [[pdf](#)]
5. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Spatial statistics of visual keypoints for texture recognition." **ECCV'2010**, Vol.6314, pages 764-777. [[pdf](#)]
6. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Invariant descriptors of sonar textures from spatial statistics of local features." **ICASSP'2010**, pages 1674-1677. [[pdf](#)]
7. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Statistiques spatiales de points d'intérêt pour la reconnaissance invariante de textures.", 5ème Congrès Francophone AFRIF-AFIA de Reconnaissance des Formes et Intelligence Artificielle, **RFIA'2010**. [[pdf](#)]
8. **H.-G. Nguyen**, R. Fablet, J.-M. Boucher. "Invariant texture descriptors based on spatial statistics, **Workshop on Advances in Seafloor-Mapping Sonar 2009**, Brest-France.
9. **H.-G. Nguyen**, B. Kerautret, P. Desbarats, J.-O. Lachaud. "Discrete Contour Extraction from Reference Curvature Function.". **ISVC'2008**, Vol.5358, pp. 1176-1185. [[pdf](#)]