

SAIMA BEN HADJ

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OBJECTIVE

Post-doctoral position in the field of image processing.

EDUCATION

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| University of Nice Sophia Antipolis, France
Ph.D. in Automatic, Signal and Image Processing | <i>2010 - Present</i> |
| National School of Computer Sciences of Tunis, Tunisia
Research Master's degree in Protocols, Networks, Image and Multimedia Systems
Equivalent to M2 | <i>2009 - 2010</i> |
| National School of Computer Sciences of Tunis, Tunisia
Computer engineering degree
Equivalent to M2 | <i>2006 - 2009</i> |
| Preparatory Institute for Engineering Studies of Nabeul, Tunisia
Undergraduate degree in Mathematics and Physics | <i>2004 - 2006</i> |
| Secondary School of Hammamet, Tunisia
High school diploma in sciences (Mathematics) | <i>2003 - 2004</i> |

EXPERIENCE

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| Morphème research group INRIA/I3S/IBV
<i>Ph.D.</i> | April 2010 - Present
<i>Sophia Antipolis, France</i> |
| <ul style="list-style-type: none">· Advisor: Laure Blanc-Féraud· Co-advisor 2010-2011: Josiane Zerubia in Ariana research group· Thesis: Restoration of three-dimensional images of confocal microscopy· Software: ImageJ, Matlab, Zeiss LSMbrowser. | |
| Ariana research group INRIA/I3S
<i>M.Sc.</i> | April 2009 - March 2010
<i>Sophia Antipolis, France</i> |
| <ul style="list-style-type: none">· Advisor: Xavier Descombes· Co-advisor: Josiane Zerubia· Thesis: Automatic object detection from high resolution remote sensing images· Language: C++ | |
| Offshore Interactive
<i>Summer internship</i> | June 2008 - August 2008
<i>Tunis, Tunisia</i> |
| <ul style="list-style-type: none">· Topic: Web application for a virtual guided tour of Tunisia· Language: PHP, javascript, Google Maps API, MySQL, J2EE | |
| National School of Computer Sciences of Tunis, Tunisia
<i>Development of image processing programs using Matlab</i> | 2007 - 2008
<i>Tunis, Tunisia</i> |

- Stereoscopy and camera calibration for 3D viewing
- Classification of a Gaussian mixture using Bayesian methods
- Pattern recognition using Geometric moments
- Dimensionality reduction algorithms (Fisher, PCA, etc)

PUBLICATIONS

Journal articles

- S. Ben Hadj, L. Blanc-Féraud, and G. Aubert
Space Variant Blind Image Restoration, submitted to Inverse Problems Journal, October, 2012.
- S. Ben Hadj, F. Chatelain, X. Descombes, and J. Zerubia
Approche non-supervisée par processus ponctuels marqués pour l'extraction d'objets à partir d'images aériennes et satellitaires, Revue Française de Photogrammétrie et de Télédétection (RFPT), vol 194, pages 2-15, 2011 (**best paper award**).

Conference articles

- S. Ben Hadj, L. Blanc-Féraud, E. Maalouf, B. Colicchio, A. Dieterlen
Depth-Variant Image Restoration in 3D Fluorescence Microscopy: Two Approaches Under Gaussian and Poissonian Noise Conditions, IEEE International Symposium on Biomedical Imaging (ISBI), Barcelona, Spain, May 2012.
- S. Ben Hadj and L. Blanc-Féraud
Modeling and Removing Depth Variant Blur in 3D Fluorescence Microscopy, IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Kyoto, Japan, March 2012.
- S. Ben Hadj and L. Blanc-Féraud
Restauration d'image dégradée par un flou spatialement variant, GRETSI Symposium on Signal and Image Processing, Bordeaux, France, September 2011.
- S. Ben Hadj and F. Chatelain and X. Descombes and J. Zerubia.
Parameter estimation for a marked point process within a framework of multidimensional shape extraction from remote sensing images, International Society for Photogrammetry and Remote Sensing (ISPRS), Paris, France, September 2010.

Research reports

- S. Ben Hadj, L. Blanc-Féraud and G. Aubert
Space Variant Blind Image Restoration, Research Report 8073, INRIA, September, 2012
- S. Ben Hadj and L. Blanc-Féraud
Restoration method for spatially variant blurred images, Research Report 7654, INRIA, June, 2011
- S. Ben Hadj and F. Chatelain and X. Descombes and J. Zerubia.
Estimation des paramètres de modèles de processus ponctuels marqués pour l'extraction d'objets en imagerie spatiale et aérienne haute résolution, Research report 7350, INRIA, July 2010.

ACADEMIC CONTRIBUTIONS

Referring papers

- Signal Image and Video Processing Journal

Teaching at University of Nice Sophia Antipolis

- C programming language for Mac OS (36h)
- Database management systems (24h)

Student mentoring

- two internship projects on Web development

COMPETENCE

Technical skills

Computer Languages: Java, C/C++, VB, Shell

Web Languages: HTML, JS/JSP, CSS, XML, XSLT, PHP, javascript

Databases: MySQL, Access

Tools: ImageJ, Matlab, Emacs, L^AT_EX

Languages

English, French, Italian, Arabic (native)

ATTENDANCE AT WORKSHOPS AND CONFERENCES

15th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)

Nice, France

October 1-5, 2012

10th ISBI Conference

Barcelona, Spain

May 2-5, 2012

37th ICASSP Conference

Kyoto, Japan

March 25-30, 2012

Plenary meeting of GDR on wave interference

Nice, France

October 24-26, 2011

23th GRETSI Symposium on Signal and Image Processing

Bordeaux, France

September, 5-8 2011

1st EIT ICT Labs Health Retreat, Computational Biology

Helsinki, Finland

June 6-10, 2011

Interdisciplinary school in Functional Microscopy in Biology

Seignosse, France

September 19-25, 2010

Summer School on Inverse Problems

Porquerolles, France

May 2-8, 2010

ISPRS Commission III Symposium on Photogrammetric Computer Vision and Image Analysis

Saint-Mandé, France

September 1-3, 2010