

Associate Professor in Computer Science at University of Toulouse
Research activities in IRIT UMR CNRS 5505 Laboratory, Toulouse, France

Adrian BASARAB

Date of birth: October 6th 1981
Nationality: French

Université Paul Sabatier Toulouse 3, IRIT UMR 5505
118 Route de Narbonne
31062 Toulouse cedex 9 France
Tel +33 5 61 55 68 82
E-mail: basarab@irit.fr
<http://www.irit.fr/~Adrian.Basarab/index.html>

Research Topics: Signal and Image Processing for biomedical imaging

- Inverse problems
- Multidimensional signal processing
- Motion estimation and image registration
- Ultrasound imaging

Short Bio

Adrian Basarab received the M.S. and PhD degrees in signal and image processing from the National Institute for Applied Sciences of Lyon, France, in 2005 and 2008. Since 2009 he is associate professor at the University Paul Sabatier Toulouse 3 and a member of IRIT laboratory (UMR CNRS 5505). His research interests include medical imaging, and more particularly inverse problems (deconvolution, super-resolution, compressive sampling, beamforming), motion estimation and ultrasound image formation.

Adrian Basarab is currently associate editor for Digital Signal Processing (Elsevier) and was a member of the French National Council of Universities Section 61 - Computer sciences, Automatic Control and Signal Processing from 2010 to 2015.

Positions

2009 *Associate Professor*, University of Toulouse
2008 *Postdoctoral position*, Catholic University of Leuven, Belgium
2008 *Assistant Professor*, University of Lyon, France

Qualifications

2008 *PhD Thesis*, Motion estimation in ultrasound imaging, INSA-Lyon
2005 *Post-graduate degree* in computer science and signal and image processing, INSA-Lyon

Publications

22 journal publications with peer review
4 book chapters
More than 50 communications at international conferences (including 8 invited talks)
1 French patent

Editorial experience and organized events

Area chair for EUSIPCO 2015, 2016 and ISBI 2013
Co-organizer of EUSIPCO 2016 special session on "Recent advances in medical image restoration"
Co-organizer of EUSIPCO 2015 special session on "Recent advances in biomedical signal and image processing"
Co-organizer and chair of CFA 2014 special session on "Compressed acquisition in acoustics"
Co-organizer and chair of IEEE ISBI 2013 special session on "Sparse Representations and Compressed Sensing in Medical Ultrasound Imaging"
Member of the local committee of CIMI workshop "Optimization and Statistics in Image Processing", 24 - 28 June 2013, Toulouse.

Referee

Referee for IEEE Trans. on Image Processing, IEEE Journal of Selected Topics in Signal Processing, IEEE Trans. on Ultrasonics, Ferroelectrics and Frequency Control, IEEE Trans. on Biomedical Imaging, IEEE Trans. on Medical Imaging, Ultrasound in Medicine and Biology, Ultrasonics.

Supervisor of junior researchers

- 1 PhD thesis started in 2016
- 2 PhD thesis started in 2015
- 4 PhD thesis started in 2013
- 2 PhD thesis defended in 2014
- 10 Post-graduate students (Image and signal processing)

Funding

- 2016-2017** 1 national grant (30k€)
- 2011-2018** 6 local grants (70k€), founded by the University of Toulouse
- 2011-2014** 1 national grant (205k€) in collaboration with 4 researchers from the University of Lyon
- 2011-2014** 1 regional grant (110k€) in collaboration with 3 researchers from the University of Toulouse

International Collaborations

Collaboration research with University of Bristol (UK), Vanderbilt University (USA), Catholic University of Leuven (Belgium), Polytechnic University of Bucarest (Romania).

Scientific and administrative responsibility

- Since 2015 Associate Editor for Digital Signal Processing journal
- Since 2012 Member of the French National Council of Universities (signal and image processing division) of the French Minister of Higher Education and Research

Teaching activities

- Image Processing (Graduate): image segmentation, image restoration
- Signal Processing (Graduate): sampling, digital filtering, stochastic signal processing.
- Medical Imaging (Graduate): ultrasound, MRI, tomographic reconstruction.