François **Rousseau**

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Appointments

Professor
Institut Mines Télécom Atlantique, LaTIM INSERM

Brest, France
2015 - Present

- Image and Information Processing Department.

Research scientist
CNRS, ICube Lab

Strasbourg, France
2006 - 2015

- Model, Image, Vision team.

Research and teaching assistant
University of Strasbourg, ENSPS, LSIIT

Strasbourg, France
2005 - 2006

- Model, Image, Vision team.

Post-doctoral fellow
University of California San Francisco

San Francisco, USA
2004 - 2005

- Biomedical Image Computing Group with Colin Studholme.

Education

”Habilitation à diriger des recherches”
University of Strasbourg

Strasbourg, France
2014

- ”Image analysis methods for brain computational anatomy”.

PhD Signal and Image Processing
University of Rennes

Rennes, France
2000 - 2003

- ”Image analysis and calibration methods for 3D freehand ultrasound”.
- Thesis advisor: Christian Barillot

MSc in Instrumentation and Control for Vision Systems
University of Rouen

Rouen, France
2000

Engineer in Applied Mathematics
INSA Rouen

Rouen, France
2000

Professional Activities

Awards and Fundings (as PI)

- 2017-2020, FRM, ”Biophysically-based computational modelling to explore impact of neonatal stroke on brain growth”
- 2015-2020, INSERM Chair of Excellence
- 2015-2019, ANR, ”Multiphysics image-based AnalysIs for premature brAin development understanding”
- 2013-2014, IMT ”Futur et Ruptures”, co-PI with Ronan Fablet, ”Learning and assimilation of high-resolution ocean dynamics”.
- 2008-2013, ERC Starting Grant, ”Computational Anatomy of Fetal Brain”
- 2008-2010, CNRS, ”Morphometry analysis of fetal brain maturation study”

Publications

- 40 articles in international journals
- 3 book chapters
- > 70 articles in conferences and workshops.

5 OF THE MOST REPRESENTATIVE PUBLICATIONS

- T. Tallinen, J. Y. Chung, F. Rousseau, N. Girard, J. Lefèvre, L. Mahadevan. "On the growth and form of cortical convolutions". Nature Physics, 2016
- C. Studholme, F. Rousseau, "Quantifying and Modelling Tissue Maturation in the Living Human Fetal Brain", International Journal of Developmental Neuroscience, 2014.
- F. Rousseau, P. Habas, C. Studholme, "A supervised patch-based approach for human brain labeling", IEEE Transactions on Medical Imaging, 2011
- F. Rousseau, "A non-local approach for image super-resolution using intermodality priors", Medical Image Analysis, 2010.
- F. Rousseau, O. Glenn, B. Iordanova, C. Rodriguez-Carranza, D. Vigneron, J. Barkovich, C. Studholme, "Registration-Based Approach for Reconstruction of High-Resolution In Utero Fetal MR Brain Images", Academic Radiology, 2006

ORGANIZATION OF SCIENTIFIC MEETINGS

- Co-organization of 3 MICCAI workshops (2009, 2011, 2012) on early brain development
- Member of program committee: MICCAI 2013, MICCAI 2014, RFIA 2016
- Co-organization of national GDR ISIS workshops (2014, 2015, 2016) on image analysis and modeling of living.

INSTITUTIONAL RESPONSIBILITIES

- Since 2017, co-leader of Modeling group, LaTIM Lab.
- Since 2016, elected member of CoNRS (National Committee for Scientific Research).
- Since 2012, elected member of AFRIF (national association for pattern recognition) board.
- 2015-2017, scientific council member of IBSAM, Brest.
- 2013-2015, leader of Biomedical Image Processing Group, ICube Lab.
- 2013-2015, elected member of ICube Lab council.

COMMISSIONS OF TRUST

- Regular reviewer for funding agencies: ERC (2015), ANR (2010, 2012, 2014), INRIA (2010), Austrian Science Fund (2012, 2014), Czech Science Foundation (2012), Swiss NSF (2012, 2014), NWO (2013).
- Regular reviewer for international scientific journals (such as IEEE Trans. Medical Imaging, Medical Image Analysis or Neuroimage), and international conferences (such as MICCAI, IEEE ISBI, IEEE EMBC).
- Reviewer for PhD thesis (Imperial College London, INRIA, Neurospin-University of Paris-Sud, CREATIS INSA Lyon, University of Paris-Descartes, University of Rouen, University of Strasbourg).
- 2012, member of lab evaluation committee ANCS (Romania).
- 2011, member of selection committee for the recruitment of Assistant Professor position (University of Nancy)
- 2009, 2010, member of lab evaluation committee AERES (France).

PHD SUPERVISION

- Karim Makki, co-supervised with Douraied Ben Salem, 2016-...
- Carlos Tor Diez, co-supervised with Nicolas Passat, 2016-...
- Marc Garetier, co-supervised with Douraied Ben Salem, 2016-...
- Antoine Legouhy, co-supervised with Christian Barillot and Olivier Commowick, 2016-...
- Juliette Ropars, co-supervised with Sylvain Brochard, 2015-...
- Chi-Hieu Pham, 2015-...
- Lucas Soustelle, co-supervised with Jean-Paul Armspach and Paulo Loureiro de Sousa, 2014-...
- Julien Pontabry, co-supervised with Christian Heinrich, 2010-2013, currently researcher at Helmholtz Zentrum Muenchen
- Mériam Koob, co-supervised with Jean-Louis Dietemann and Jean-Paul Armspach, 2008-2012, currently MD at CHU Hautepierre Strasbourg
- Benoit Caldairou, co-supervised with Christian Heinrich and Nicolas Passat, 2008-2012, currently postdoc at McGill Montréal
- Swati Sharma, co-supervised with Jean-Paul Armspach and Fabrice Heitz, 2007-2011, currently associate professor at DeVry University Chicago

POSTDOC SUPERVISION

- Estanislao Oubel, 2009-2011, currently engineer at Median Technologies
- Larbi Boubchir, 2012-2013, currently assistant professor at University Paris 8
- Pierre-Henri Conze, 2014-2015, currently assistant professor at IMT Atlantique

RESEARCH ENGINEER SUPERVISION

- Marc Schweitzer, 2012-2013, currently engineer at IRCAD Strasbourg
- Frédéric Champ, 2012-2013, currently engineer at IRCAD Strasbourg
- Aicha Ben Taieb, 2012-2013, currently PhD student at SFU Vancouver

MSc Supervision

- Loic Willmann, 2008
- Anne-Sophie Puthon, 2009
- Julien Pontabry, 2010
- Mathieu Stumpf, 2012