

M. JACQUES-OLIVIER **LACHAUD** , 50 years old, widowed, 2 children
TENURED PROFESSOR of Computer Science
Laboratory of Mathematics (UMR CNRS 5127), University Savoie Mont Blanc
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Research topics: image analysis, digital geometry, digital and combinatorial topology, discrete and continuous deformable models, convergence of geometric estimators, word combinatorics, variational models, shape optimisation, discrete differential calculus, geometry processing

Curriculum

- 9/2007–today **Professor of Computer Science**, University Savoie Mont Blanc
Laboratory of Mathematics (LAMA, UMR CNRS 5127)
- 9/1999–8/2007 **Associate Professor of Computer Science**, University Bordeaux 1
Laboratory of Computer Science (LaBRI, UMR CNRS 5800)
- 9/1998 – 8/1999 **Post-doctorate**, University of Toronto, Ontario. *Dir* : Demetri Terzopoulos.
Topic : Solid modeling for craniofacial surgery simulation.
- 9/1994 – 8/1996 **PhD student**, laboratories LIP (ENS-Lyon) et TIMC (IMAG, Grenoble).
- 9/1997 – 8/1998 *Advisor* : Annick Montanvert. Obtained with highest Honors (“Félicitations”).
- 1991–1994 **ENSIMAG engineer, Master Computer Science**, University J. Fourier.

Significant facts

- 9/2012 – 8/2013 **Research position** in LJK, Grenoble (délégation CNRS).
- 12/2006 **Ability to Conduct Researches** (Habilitation). University Bordeaux 1.
Title : Non-Euclidean spaces and image analysis: riemannian and discrete deformable models, digital topology and geometry
- 10/2003 – 9/2005 **Research position** in LaBRI (délégation CNRS)
- 7/1998 **PhD in Computer Science**. University Joseph Fourier.
Title: Surface extraction from three-dimensional images, discrete approach and deformable model approach

Scientific responsibilities

- 1/2010–12/2016 **National Leader** of WorkGroup in Digital Geometry of GdR IM/IG-RV
- 9/2016–11/2017 **Team leader** LIMD, LAMA, Université Savoie Mont Blanc
- 1/2011–3/2014 **Associate director** of LAMA, Université Savoie Mont Blanc
- 2009–today **Member** of Research Committee in Computer science (CC27), USMB.

Administrative responsibilities, University Savoie Mont Blanc

- 9/2016–today **Director** of **Cursus Master Ingénierie Informatique**, UFR ScEM.
- 2015-2016 **Co-writer** of **Cursus Master Ingénierie Informatique** proposal, UFR ScEM.
- 9/2008–8/2012 **Director** of Computer Science departement, UFR SFA

Scientific organisations

- 29/3–2/4/2021 **Main chair** conference Digital Geometry and Discrete Variational Calculus
9/11/2015 **Chair** workshop Géométries Discrètes, Algorithmiques et Applications
since 2010 10 invited/keynote speaker: TMA'22, TAIR'19, BIRS'19, CVGMTA'16, DGCI'16, . . . , 2 int. tutorials (SGP'21, ACPR'19), 4 tutorials DGTAL

Expert assessments, reviewing and other scientific activities

- since 2016 Member of steering committee, int. conf. “Discrete Geometry for Computer Imagery”, then “Digital Geometry and Mathematical Morphology” (since 2020)
2017, 2018, 2019 Jury member of national PhD student award from GdR IM/GdR IG-RV
2012, 2013, 2014 Jury member of national PhD student award from Gilles Kahn / SIF
since 2011 \approx 15 expert assess. (ITI-IRMIA, FNRS, NSERC, ANR, FWO, HCERES, . . .)
since 2009 Member and 2 \times president of 7 PR and 6 MCF recruitment committees
since 2011 Member of 7 HDR committees, 6 \times rapporteur
since 2007 Member of 33 PhD committees, 14 \times rapporteur, 5 \times president
since 2007 40 reviews for int. journals (JMIV, PR, PRL, SIIMS, CVIU, DAM, CAD, etc), 55 reviews for int. conf. (DGMM, DGCI, SIGGRAPH, IWCIA, PG, etc)

Main scientific projects (since 2007)

- 2/2023–1/2028 **Scientific leader** for LAMA of project **ANR StableProxies**, *Stable Geometry Processing and High Perf. Calculus on Heter. Geometric Data*, 551 k€
10/2015–8/2021 **Principal Investigator** of project **ANR “Défi de tous les savoirs” CoMeDiC**, *Convergent Metrics for Digital Calculus*, 473 k€
10/2018–9/2022 Member of project **ANR JCJC PARADIS**, *PARAmeter-free Analysis of Digital Surfaces*, 260 k€
9/2011–12/2015 **Scientific leader** for LAMA for project **ANR blanc Digital Snow**, *Discrete geometry and applied mathematics for snow metamorphosis*, 146 k€.
12/2010–7/2015 Member of project **ANR blanc KIDICO**.
1/2007–12/2010 **Scientific Leader** for LaBRI/LAMA of project **ANR MDCA FOGRIMMI**, *Mining Large microscopic images*, 62 k€
9/2006–4/2011 **Scientific Leader** for LaBRI/LAMA of project **ANR blanc GeoDIB**, *Geometry of noisy discrete objects*, 77 k€

PhD and post-doctoral research advisor

- 2010–2015 Research advisor for 4 post-doctorate students
2001–2022 Research advisor for 12 PhD students: 10 defended, 1 stopped for medical reasons, 1 on-going

Publications and software realizations

- 7 editorships of conference proceedings or special issues, book chapters
38 publications in international journals (DCG, JMIV, PR, TPAMI, TVCG, CGF, C & G, SIIMS, CVIU, DAM, TCS, DM, MedIA, GMod, IVC, CGTA, IJSM)
64 communications to int. conferences with reviewing committee and proceedings (DGMM/DGCI, ICPR, ACPR, IWCIA, SGP, PG, ECCV, SMI, ICIP, etc)
since 2010 **Co-founder and big contributor** of project DGTAL, *Digital Geometry Tools and Algorithms*, a federative C++ library <https://dgtal.org>
Author of 531/1680 source files, 60/130 user doc.
2016 DGTALreceives the **software award** of Symposium on Geometry Processing