**CURRICULUM VITAE**

Nicolas LOMENIE, Ing., Dr., Habil.  
Birth date: 07 January 1974

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Site: http://www.math-info.univ-paris5.fr/~lomm/  
CNU Section: 27  
Research Team: LIPADE, EA 2517

**EDUCATIONAL AND PROFESSIONAL BACKGROUND**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Date</th>
<th>Diplôme et Fonction</th>
</tr>
</thead>
<tbody>
<tr>
<td>University Paris Descartes</td>
<td>11 June 2013</td>
<td>“Habilitation à Diriger des Recherches” : Informatics and Image Processing</td>
</tr>
<tr>
<td>University Paris Descartes</td>
<td>since Sept. 2002 - currently</td>
<td>Associate Professor <a href="http://w3.mi.parisdescartes.fr/sip-lab/">http://w3.mi.parisdescartes.fr/sip-lab/</a></td>
</tr>
<tr>
<td>University Pierre et Marie Curie</td>
<td>Nov. 1996-Oct. 1997</td>
<td>Master Degree : Artificial Intelligence, Pattern Recognition and Applications</td>
</tr>
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**COLLABORATIONS (FUNDED PROJECTS)**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Project Details</th>
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<tbody>
<tr>
<td>CNES, Toulouse</td>
<td>Laster Technology SA, INRIA and Cité des Sciences et de l'Industrie, France (Local responsible for a French Research Agency project ANR-RIAM-REVES-2007 about Virtual Reality) Grant : 530 000 euros for the project, including 64 000 euros for the LIPADE partner.</td>
</tr>
<tr>
<td>IGN, Paris</td>
<td>AGFA Healthcare and TRIBVN SA, French Research Agency project ANR-TECSAN-MICO about Cognitive Microscopy Grant : About 1 million euros for the project, including 300 000 euros for the IPAL partner.</td>
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<tr>
<td>Institut Pasteur, Paris</td>
<td>A*STAR, Biopolis Research Centers Singapore and I2R</td>
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<td>Hôpital de la Pitié Salpêtrière, Paris</td>
<td>France Telecom, Paris</td>
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<tr>
<td>METU (Middle East Technical University), Ankara, Turkey</td>
<td>(Local responsible for a PAI Bosphorus – now Hubert Curien program - about Object Categorization)</td>
</tr>
<tr>
<td>INRA [French Agronomic Institute via ITAVI], Tours, France, (Local responsible for a French Research Agency project ANR-RNTL-VISAVI-2008 about Bird Visual Perception) Grant : 700 000 euros for the project, including 97 000 euros for the LIPADE partner</td>
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</tbody>
</table>

**PUBLICATIONS AND COMMUNICATIONS**

**Books**


**Chapters**


**Edition**


**International Journal**


[J5] N. Loménie and Daniel Racoceanu, **Point Sets Morphological Filtering and Semantic Spatial Configurations Modeling: application to microscopic image analysis**, Pattern Recognition, 45(8), pp. 2894–2911, 08/2012


[J3] G. Erus and N. Loménie, **How to involve structural modeling for cartographic object recognition tasks in high-resolution satellite images?**, Pattern Recognition Letters, vol. 31(10), pp. 1109-1119, 07/2010


**International Conferences with committee**


[C23] Armand DJIRO, Camille KURTZ, and Nicolas Loménie, **Assessment of anti-tumor immune response in colorectal carcinomas from Whole Slide Images**, International Conference on Image Analysis and Recognition, ICIAR 2018, June 2018, Portugal

[C22] Shijian Lu, Byung-Uck Kim, Nicolas Loménie, Joo-Hwee Lim, Jianfei Cai. **Search Guided Saliency.** Computer Vision - ACCV Workshops, Singapore, LNCS, Jawahar, C.V., Shan, Shiguang (Eds.), pp. 443-456, Nov. 2014


[C14] N. Loménie, Reasoning with spatial relations over high-content images, IEEE World Congress on Computational Intelligence, WCCT2010, hosting the International Joint Conference on Neural Networks, IJCNN’2010, Barcelona, Spain, July 2010


**International Conferences**


**National Conferences with committee and international audience**


Research reports


Seminars

- National University of Singapore (NUS), Janvier 2015.
- Columbia University, Department of BioEngineering, New York, Mai 2014
- National University of Singapore (NUS), Juin 2008.
- Simon Fraser University of Vancouver (SFU), Déc. 2007.
- METU (Middle East Technical University), Ankara, Turkey. For Foreign Affairs Minister, as invited lecturer, Juillet 2001, Mai 2007.
- CAOR, Ecole des Mines.

Patent

- Prioritary patent no FR185513, entitled « PROCÉDÉ DE DÉTERMINATION DE L’INFILTRATION DE CELLULES BIOLOGIQUES DANS UN OBJET BIOLOGIQUE D’INTÉRÊT » filed the 21st of June 2018.

Collective responsibilities

- Member of the steering committee of the Bachelor Degree Paris Descartes and responsible for the joint degree at the master level with ENIT, Tunis.
- Leading the Medical Image Understanding team ([http://ipal.i2r.a-star.edu.sg/research-axes](http://ipal.i2r.a-star.edu.sg/research-axes)) at IPAL, CNRS from January 2010 to September 2011.
- Organisation of the Cross-Knowledge meeting between IPAL, NUS, I2R from January 2010 onwards: [http://ipal.i2r.a-star.edu.sg/event/cross-knowledge](http://ipal.i2r.a-star.edu.sg/event/cross-knowledge)
- Serving as expert for French Agencies: ANR, AUF, CIFRE
- Serving as reviewer: Pattern recognition, Pattern recognition letters, Geoscience and remote sensing letters, Computerized Medical Imaging and Graphics, etc.
- Serving as a member of recruiting committee (University Paris 5 (section 26) and Metz)
- Serving as a member of 10 Ph.D. defence committees and many mid-term committee reviews:
  - Adel Hafiane, FCM with Spatial and Multiresolution Constraints for Image Segmentation, director Bertrand Zavidovique, President University Paris 11, 2005
  - Julien Richefeu, Motion detection and analysis in digital retina-based vision systems , director Antoine Manzanera, University Paris 6, 2006
  - Elodie Dusch, Modélisation de la réponse impulsionnelle pour la détection de particules en microscopie par fluorescence, director Auguste Genovesio, University Paris 5, 2008
  - Guray Erus, Reconnaissance d’objets cartographiques dans les images satellites à haute résolution, director Georges Stamon, University Paris 5 (as co-director 80%), 2008
  - Rabie Hachémi, Vision Artificielle pour l’Analyse de la Perception Animale: Un Outil d’Aide à la Pr évision du Comportement Alimentaire, director Nicole Vincent, University Paris 5 (as co-director 50%), 2010
  - Adina Tutac, Formal Representation and Reasoning for Microscopic Medical Image-Based Prognosis. Application to Breast Cancer Grading, director Daniel Racoceanu, University of Besançon and University of Timisoara, 2010
• Stéphane Rigaud, director Daniel Racoceanu et Joo Hwee Lim, Université Paris 6, (as co-director 50%), 2014.
• Aymen Sellaouti, director Aline Deruyver, Université de Strasbourg, (as a reviewer) 2014.
• Chloé Murtin, director David Rousseau, Université de Lyon (as president) october 2016.
• Somia Rahmoun, director Tadeusz Sliwa et de Fabrice Mairesse. Caractérisation et mesure de courbes imparfaites en résolution limitée, Université de Bourgogne France Comté, décembre 2017

Elective Duties

2016 – onward Representative at the department CS (Scientific Council)
2005 -2009 Ass. Professors representative in faculty committees and councils
Before 2007 : representative at the CEVU (Study and University Life Council) of the University and its board.
Since 2007 : representative at the CS (Scientific Council) of the University and its board as well as the local department councils.
2007-2009 : councillor at the Bureau de l'Université (University Board).

Academic and Teaching Skills

Fields : Image Analysis, Computer Vision, Pattern Recognition, Machine Learning, Artificial Intelligence, Database and Data Mining, Bioinformatics, Computational Biology

Computer Languages : C, C++, Java

Operating Systems : Linux (mainly used), Unix, Windows

Languages : French (mother tongue), English (fluent)

Illustration of Average Teaching Duties

<table>
<thead>
<tr>
<th>Discipline</th>
<th>French Level</th>
<th>Hours Teaching A year</th>
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<tbody>
<tr>
<td>Database</td>
<td>M1</td>
<td>24 h tutorial</td>
</tr>
<tr>
<td>Data Mining</td>
<td>M1</td>
<td>40 h lecture / 40 h tutorial</td>
</tr>
<tr>
<td>Bio-Informatics</td>
<td>L3</td>
<td>15h TD</td>
</tr>
<tr>
<td>Computational Biology</td>
<td>L2</td>
<td>15h Cours / 20h tutorial</td>
</tr>
<tr>
<td>Image Analysis &amp; Pattern Recognition</td>
<td>M2</td>
<td>22 h lecture / 15 h tutorial</td>
</tr>
<tr>
<td>Java</td>
<td>L3</td>
<td>15 h lecture / 15h tutorial</td>
</tr>
<tr>
<td>Artificial Intelligence</td>
<td>M2</td>
<td>10 h lecture</td>
</tr>
</tbody>
</table>

All lectures apart from the programming language ones were designed from scratch. In particular the Computer Vision ones were part of our team efforts to build up a master program about Digital Image Handling.