Daniel RACOCEANU

BioMedical Image, Information & Data Computing
Professional webpages: https://daniraco.github.io/

SCIENTIFIC PUBLICATIONS / PUBLICATIONS SCIENTIFIQUES

Publications online: https://daniraco.github.io/publications.html

Journals with a reviewing committee

1. Ayse Gungor, Ilias Sarbout, Aubrey Gilbert, Steffen Hamann, Pierre Lebranchu, Hobeanu, Philippe Gohier, Catherine Vignal-Clermont, Oana M. Dumitrascu, Salomon-Yves Cohen, Wolf A. Lagrèze, Nicolas Feltgen, Frank van der Heide, Cédric Lamirel, John J. Chen, Jost B. Jonas, Michael Obadia, Daniel Racoceanu, Dan Milea (2025) AI-based Detection of Central Retinal Artery Occlusion within 4.5 hours on Standard Fundus Photographs, JAHA - Journal of the American Heart Association (in press).
2. Marin, L.E., Zavaleta-Guzman, D.I., Gutierrez-Garcia, J.I., Racoceanu, D., Casado, F.L. (2025) Prediction of biochemical prostate cancer recurrence from any Gleason score using robust tissue structure and clinically available information. *Discover Oncology*, 16(1), art. no. 128. https://doi.org/10.1007/s12672-025-01896-7.
3. Ounissi, M., Sarbout, I., Hugot, J.-P., Martinez-Vinson, C., Berrebi, D., Racoceanu, D. (2024) Scalable, Trustworthy Generative Model for Virtual Multi-Staining from H&E Whole Slide Image, https://doi.org/10.48550/arXiv.2407.00098.
4. Kumar, P., Lacroix, M., Dupré, P., Arslan, J., Fenou, L., Orsetti, B., Le Cam, L., Racoceanu, D., Radulescu, O. (2024). Deciphering oxygen distribution and hypoxia profiles in the tumor microenvironment: a data-driven mechanistic modeling approach. Phys Med Biol. 2024 Jun 14; 69(12). https://iopscience.iop.org/article/10.1088/1361-6560/ad524a. PMID: 38815610.
5. Ingrassia, L., Boluda, S., Jimenez, G., Kar, A., Racoceanu, D., Delatour, B., Stimmer, L. (2024). Automated deep learning segmentation of neuritic plaques and neurofibrillary tangles in Alzheimer's disease brain sections using a proprietary software, Journal of Neuropathology and Experimental Neurology. https://doi.org/10.1093/jnen/nlae048.
6. Ounissi, M., Latouche, M., Racoceanu, D. (2024). PhagoStat a scalable and interpretable end-to-end framework for efficient quantification of cell phagocytosis in neurodegenerative disease studies, Scientific Reports, https://doi.org/10.1038/s41598-024-56081-7, https://www.nature.com/articles/s41598-024-56081-7.
7. Liu, X., Hu, W., Diao, S., Abera, D. E., Racoceanu, D., Qin, W. (2024). Multi-scale feature fusion for prediction of IDH1 mutations in glioma histopathological images, Computer Methods and Programs in Biomedicine, Elsevier, vol. 248, pp. 108116, doi: https://doi.org/10.1016/j.cmpb.2024.108116
8. Diao S., Tian Y., Hu W., Hou J., Lambo R., Zhang Z., Xie Y., Nie X., Zhang F., Racoceanu D., Qin W. (2022). Weakly supervised framework for cancer region detection of hepatocellular carcinoma in whole-slide pathologic images based on multiscale attention convolutional neural network. *American Journal of Pathology*. 192(3):553-563. doi:10.1016/j.ajpath.2021.11.009.
9. Fraggetta F, L'imperio V, Ameisen D, Carvalho R, Leh S, Kiehl TR, Serbanescu M, Racoceanu D, Della Mea V, Polonia A, Zerbe N, Eloy C. (2021). Best practice recommendations for the implementation of a digital pathology workflow in the anatomic pathology laboratory by the european society of digital and integrative pathology (ESDIP). *Diagnostics*, 11(11):2167. doi:10.3390/diagnostics11112167.
10. Jiménez, G., Racoceanu, D. (2019). Deep Learning for Semantic Segmentation versus Classification in Computational Pathology: Application to mitosis analysis in Breast Cancer grading, Front. Bioeng. Biotechnol., 21 June 2019, doi: 10.3389/fbioe.2019.00145.

11. Marin, L., Casado, F., Racoceanu, D. (2019), Classification of prostate cancer based on clinical and omic data using neural networks techniques to improve prognostic power, European Urology Supplements 18(1):e1783; DOI: 10.1016/S1569-9056(19)31292-8.

12. Marin, L., Casado, F., Pinto, J.A., Racoceanu, D., (2019). Classification of prostate cancer based on clinical and omics data using neural networks techniques to improve prognostic power, Journal of Clinical Oncology 37(15_suppl):e16569-e16569 ; DOI: 10.1200/JCO.2019.37.15_suppl.e16569.

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**** 1st Place Prize - 2019 IEEE Engineering in Medicine and Biology Prize Paper Award.***

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Edited books, symposium proceedings, scientific journals special issues

1. *Special Issue MICCAI 2020*, Purang Abolmaesumi, Anne Martel and Daniel Racoceanu (Eds), *Medical Image Analysis*, sept. 2021, ISSN: 1361-8415, https://www.sciencedirect.com/journal/medical-image-analysis/special-issue/10BZVX3V2TL.
2. Martel, A.L., Abolmaesumi, P., Stoyanov, D., Mateus, D., Zuluaga, M.A., Zhou, S.K., Racoceanu, D. and Joskowicz, L. (Eds.), *Medical Image Computing and Computer Assisted Intervention - MICCAI 2020*, 23rd International Conference, Lima, Peru, October 4-8, 2020, Proceedings (7 volumes / parts), *Springer*:
    - Part I: https://www.springer.com/gp/book/9783030597092
    - Part II: https://www.springer.com/gp/book/9783030597122
    - Part III: https://www.springer.com/gp/book/9783030597153
    - Part IV: https://www.springer.com/gp/book/9783030597184
    - Part V: https://www.springer.com/fr/book/9783030597214
    - Part VI: https://www.springer.com/gp/book/9783030597245
    - Part VII: https://www.springer.com/gp/book/9783030597276
3. Racoceanu, D., Hufnagl, P. (Eds), Special Issue - "Scalable and Efficient Imaging Technologies for Digital Pathology", CMIG - Computerized Medical Imaging and Graphics, Elsevier, Volume 61, Pages 1-34 (November 2017)
4. Racoceanu, D., Belhomme, P., (Eds.), Special issue: "Breakthrough technologies in digital pathology", CMIG - Computerized Medical Imaging and Graphics, Elsevier, vol. 2, June 2015, pp.1, DOI: http://dx.doi.org/10.1016/S0895-6111(15)00047-6.
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6. Loménie, N., Racoceanu, D., Gouaillard, A., (Eds.), Advances in Bio-Imaging: From Physics to Signal Understanding Issues, State-of-the-Art and Challenges, Springer Series: Advances in Intelligent and Soft Computing, vol. 120, 2012, 2012, XXII, 246 p., ISBN 978-3-642-25546-5, January 9, 2012.
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8. Nakai, T., Racoceanu, D. (Eds.), Special Issue on ONtology and COntext related MEdical image Distributed Intelligent Access, International Symposium of the 26th Annual Meeting of Japanese Society for Medical Imaging Technology (JAMIT), Tsukuba International Convention Center, 20 July 2007, Tsukuba, Japan, Medical Imaging Technology, vol.25 No.5, Nov. 2007.

Book Chapters

1. Popovici, V., Racoceanu, D. (2025). From histopathology images to molecular characterisation of tumours: The artificial intelligence path, in Recent Advances in Histopathology, Vol 27 – Ed. Fred T Bosman and Dr. Ivan Damjanov. Jaypee Brothers Medical Publishers, https://hal.science/hal-04895755
2. Jiménez, G., Racoceanu, D. (2023). Computational Pathology for Brain Disorders. In: Colliot, O. (eds) Machine Learning for Brain Disorders. Neuromethods, vol 197, pp. 533-572 (40 pages), Humana Press, New York, NY. https://doi.org/10.1007/978-1-0716-3195-9_18.
3. Racoceanu D, Ounissi M, Kergosien Y. (2022) Explicabilité en Intelligence Artificielle ; vers une IA Responsable. Instanciation dans le domaine de la santé. Techniques de l'Ingénieur. Published online December 10, 2022. doi:10.51257/a-v1-h5030 – 22 pages.
4. Zemouri, R., Racoceanu, D. (2021). Innovative Deep Learning Approach for Biomedical Data Instantiation and Visualization, in Deep Learning for Biomedical Data Analysis: Techniques, Approaches/Application, Springer.
5. Lomenie, N., Racoceanu, D. (2012). Ontology-Enhanced Vision System for New Microscopy Imaging Challenges, Advances in Bio-Imaging: From Physics to Signal Understanding Issues, vol. 120, series Advances in Intelligent and Soft Computing, pp 157-172.
6. Loménie, N., Racoceanu, D., Stamon, G. (2011). Point Set Analysis: An Image Analysis Point of View for Rapid Prototyping Technologies, in Rapid Prototyping / Book 1", Ed. M. Hoque, ISBN 978-953-307-970-7, InTech, July 2011.
7. Teodorescu, R. O., Cretu, V. I., Racoceanu, D. (2013). Parkinson's Disease Diagnosis and Prognosis Using Diffusion Tensor Medical Imaging Features Fusion, "Biomedical Engineering, Trends in Electronics, Communications and Software, Ed. Anthony N. Laskovski, ISBN: 978-953-307-475-7, InTech, Jan. 2011 (3000 downloads @ 01/2013).
8. Su, M. J., Cheng, P. H., Chen, S. J., Yang, C. Y., Yip, P. K., Racoceanu, D., Chen, H. S. (2010). Medical Image Intelligent Access Integrated with Electronic Medical Records System for Brain Degenerative Disease, Data Storage, Book edited by: Florin Balasa, ISBN: 978-953-307-063-6, Publisher: InTech, Apr. 2010, pp. 201-211.
9. Lacoste, C., Chevallet, J. P., Lim, J. H., Hoang, D. L. T., Xiong, W., Racoceanu, D., Teodorescu, R. O., Vuillenemot, N. (2007). Inter-Media Concept-Based Medical Image Indexing and Retrieval with UMLS at IPAL, in Lecture Notes in Computer Science, Evaluation of Multilingual and Multi-modal Information Retrieval, vol. 4730, pp. 694-701.

Conferences Invitee

1. Racoceanu D. (2025), Hand in hand with XAI on a biomedical imaging journey, Journées Ouvertes en Biologie, Informatique et Mathématiques (JOBIM), Bordeaux, France.
2. Racoceanu D. (2025). Explainable Artificial Intelligence (XAI): a modern Ariadne's thread in Biomedical Imaging. Supporting Discovery of new knowledge, Frugal environmental respecflul Computational Approaches. Use cases : PhagoStat - efficient quantification of cell phagocytosis in neurodegenerative disease studies / Virtual staining - Scalable, Trustworthy Generative Model for Virtual Multi-Staining from H&E Whole Slide Images, Computer Vision for Drug Discovery (CVDD) workshop, IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), Nashville, TN, USA.
3. Racoceanu, D. (2024). Explainable, Hand in hand with AI on a medical imaging journey, Romanian AI days, Bucharest, Romania.
4. Racoceanu, D. (2024). Virtual staining using trustworthy and scalable pipeline, Invited Speaker, European Congress on Digital Pathology – ECDP 2024, Vilnius, Lithuania.
5. Racoceanu, D. (2024). What would Socrates say about AI? - *Guest of Honor* - Annual Conference of the National Academy of Medical Sciences (NAMS), hosted by Bombay Hospital Institute of Medical Sciences, Mumbai India.
6. Racoceanu, D. (2024). Last advances in AI and eXplainable AI, invited speaker, Soirée de Recherche à *l'Hôpital Fondation Adolphe de Rothschild*, Paris, France.
7. Racoceanu, D. (2024). Qvo vadis homine, AI ? invited speaker, CEFIPRA Indian-French workshop on XAI for Brain pathologies, Vijayawada, Inde, 19-21 Feb. 2024.
8. Racoceanu, D. (2023). Tumor heterogeneity, tumor micro-environment analysis, modeling and simulation and sparse 3D data reconstruction in computational histopathology, Keynote

speaker, MICCAI workshop on Computational Mathematics Modeling in Cancer Analysis (CMMCA2023), MICCAI - International Conference on Medical Image Computing and Computer-Assisted Intervention, Vancouver, Canda.

9. Racoceanu, D. (2023). Explicabilité en Intelligence Artificielle : challenges et opportunités en santé et en recherche biomédicale, invited speaker, Rencontres DIM C-BRAINS -- Google, « IA, cerveau et cloud computing : explorer les frontières de l'innovation », 13 septembre 2023, Paris, France.
10. Racoceanu, D. (2021). Explainable IA: towards a Responsible AI, *keynote speaker*, *SIPAIM 2021* - 17th International Symposium on Medical Information Processing and Analysis, Campinas, Brazil.
11. Racoceanu, D. (2019). Vessels detection for angiogenesis quantification deep learning & marked point process, ECDP 2019 – 15th European Congress on Digital Pathology, Warwick, UK, 10-13 April, 2019.
12. Racoceanu, D. (2019). Tumor Heterogeneity Analysis, Indexing and Simulation in Computational Pathology, Shenzhen Institute of Advanced Technology (SIAT), Shenzhen, China.
13. Racoceanu, D. (2019). Computational Pathology: A Path Ahead, Café de la Neuroinformatique, Institut du Cerveau et de la Moelle épinière (ICM), Paris, France.
14. Racoceanu, D. (2019). Artificial intelligence for biomedical image analysis applications: lessons learned from personal projects, expertise and contributions, Institut du Cerveau et de la Moelle épinière (ICM), Paris, France, 10 May 2019.
15. Racoceanu, D. (2018). Integrative Computational Histopathology with Latin America. Invited speaker, Computational Pathology Symposium, ECP 2018 - 30th European Congress of Pathology, Bilbao, Spain, 8-12 Sept. 2018.
16. Racoceanu, D. (2018). A Simulation Model for Computational Histopathology issued from the study of Tumour Microenvironment. An instantiation in Breast Carcinomas, Invited speaker, 14th European Congress on Digital Pathology, Helsinki, Finland, May 29th – June 1st, 2018.
17. Racoceanu, D. (2018). Artificial Intelligence Applied to Very Large Image Analysis in Medicine (Digital Pathology), Invited Speaker, Día Mundial de las Telecomunicaciones, la Sociedad de la Información, y el Internet, Pontifical Catholic University of Peru.
18. Racoceanu, D. (2017). Integrative Computational Pathology and beyond …, Keynote speaker, Digital Pathology and Image Analysis, San Antonio, USA, November 15-16, 2017.
19. Racoceanu, D. (2017). Integrative Digital Pathology and beyond, Invited Speaker, National University of Colombia, Bogota, Colombia, 9th of May 2017.
20. Racoceanu, D. (2016). Integrative digital pathology: semantics and scalable imaging methods, DIGITALPath Europe 2016, London, 18-19 May 2016.
21. Racoceanu, D. (2016). Are we ready to deal with traceability and massive data in Digital Pathology?, Special session on Biomaker Detection and Discovery in Histopathology Images, 2016 IEEE International Symposium on Biomedical Imaging (IEEE ISBI), Prague, Czech Republic, 13-16 April 2016.
22. Racoceanu, D., Rossi, F. (2016). Terres d'innnovation Singapour, une plate-forme d'innovation et de R&D unique en Asie, Invited Speaker, Congres C.U.R.I.E., 6-9 June 2016, Deauville, France.
23. Racoceanu, D. (2015). Semantics, micro-semiology and scalability in future Digital Patholgy, Digital Pathology Congress, 21-22 September 2015, Kuala Lumpur, Malaysia.
24. Racoceanu, D. (2015). Insights about scalability and big data in Digital Pathology. Recent projects and outcomes, Dublin Pathology 2015. 8th Joint Meeting of the British Division of the IAP and The Pathological Society, June 23rd, 2015, Dublin, Ireland.
25. Racoceanu, D. (2015). Semantic-Driven Image Exploration for WSI. Scalability for big data, Information Technology in Digital Pathology, AIDPATH EU, May 26th, 2015, Madrid, Spain.
26. Racoceanu, D. (2014). Semantic-Driven Image Exploration for WSI. Scalability for big data, Digital Pathology Congress, 4-5 December 2014, London, UK.
27. Racoceanu, D. (2014). Big data in microscopy, Invited Speaker, French National Center for Scientific Research (CNRS) Research Group - Technologies for Healthcare - GdR STIC-Santé, Lyon, France, 23-25 Sept. 2014.

28. Racoceanu, D. (2014). Towards the future of Digital Pathology, Invited Talk, Massachusetts General Hospital - MGH, Boston, MA, USA, 17 Sept. 2014.
29. Racoceanu, D. (2014). Digital Pathology: a semantic driven protocol for WSI exploration, Invited Speaker, Harvard Medical School, Beth Israel Deaconess Medical Center (BIDMC), Pathology Department, Boston, MA, USA, 15 Sept. 2014.
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✓ International Journal Reviewing

- Medical Image Analysis
- IEEE TIP – IEEE Transactions on Image Processing
- IEEE TMI – Transactions on Medical Image
- IEEE TBME – IEEE Transactions on Biomedical Engineering
- CMIG (Elsevier) - Computerized Medical Imaging and Graphics
- JDP - Journal of Diagnostic Pathology
- ACM (Association for Computing Machinery) - Computing Reviews
- IMIA Yearbook – Medical Informatics (since 2008)

✓ Patents and copyrights

1. Filled International Patent - PCT/EP2025/053151, filed on February 6, 2025, applicant : Institut du Cerveau et de la Moelle Épinière – ICM ; Assistance Publique Hôpitaux de Paris – APHP ; Centre National de la Recherche Scientifique – CNRS ; Institut National de la Santé et de la Recherche Médicale - INSERM ; Sorbonne Université ; Université Paris Cité, authors: Ounissi, M., Racoceanu, D., Berrebi, D., title of the application: device and method for generating n virtual immunohistochemical (IHC) stain images from one hematoxylin and eosin (H&E) stain image (virtual staining - paired images).
2. Filled International Patent - PCT/EP2025/053153, filed on February 6, 2025, applicant : Institut du Cerveau et de la Moelle Épinière – ICM ; Assistance Publique Hôpitaux de Paris – APHP ; Centre National de la Recherche Scientifique – CNRS ; Institut National de la Santé et de la Recherche Médicale - INSERM ; Sorbonne Université ; Université Paris Cité, authors: Ounissi, M., Racoceanu, D., Berrebi, D., title of the application: device and method for generating n virtual immunohistochemical (IHC) stain images from one hematoxylin and eosin (H&E) stain image (virtual staining - unpaired images).
3. Filled European patent - EP 24 305 221.4, region: Europe, filed on: February 9, 2024, applicant: Institut du Cerveau et de la Moelle Épinière – ICM ; Assistance Publique Hôpitaux de Paris – APHP ; Centre National de la Recherche Scientifique – CNRS ; Institut National de la Santé et de la Recherche Médicale - INSERM ; Sorbonne Université ; Université Paris Cité, authors: Ounissi, M., Racoceanu, D., Berrebi, D., title of the application: device and method for generating n virtual immunohistochemical (IHC) stain images from one hematoxylin and eosin (H&E) stain image (virtual staining - paired images).
4. Filled European patent - EP 24 305 224.8, region: Europe, filed on: February 9, 2024, applicant: Institut du Cerveau et de la Moelle Épinière – ICM ; Assistance Publique Hôpitaux de Paris – APHP ; Centre National de la Recherche Scientifique – CNRS ; Institut National de la Santé et de la Recherche Médicale - INSERM ; Sorbonne Université ; Université Paris Cité, authors: Ounissi, M., Racoceanu, D., Berrebi, D., title of the application: device and method for generating n virtual immunohistochemical (IHC) stain images from one hematoxylin and eosin (H&E) stain image (virtual staining - unpaired images).
5. Mitosis Detector – Détecteur de mitoses pour l'histopathologie, Déclaration Logicielle CNRS n° DL 05963-01 pour l'UMI 2955 IPAL, 2013.
6. A 3 Dimensional Tracking Method for Time-lapse Suspension Cell and Cell sphere Image Acquisition using Phase Contrast Microscopy, US Patent Application filed, Nov. 2012.
7. A 3 Dimensional Tracking Method for Time-lapse Suspension Cell and Cell sphere Image Acquisition using Phase Contrast Microscopy, SG Patent Application filed on the 12 August 2011, ETPL ref: BII/P/06731/00/SG.
8. PDFibAtl@s - System for detection and prognosis of the Parkinson's Disease using MRI DTI information fusion - CNRS copyright (declaration logicielle) DL 04137-01 CNRS UMI2955, submitted on the 16th of December 2010, approved on the 13th of May 2011.
9. HISTOGRAD - Virtual microscope for breast cancer grading / CNRS copyright (declaration logicielle) DL 2944-01 for the international research unit UMI CNRS 2955, Copyright granted in June 2009 (Dépôt APP - N° d'enregistrement : IDDN.fr.001.190019.000.S.P.2010.000.20900 en date du 14 Mai 2010).
10. Dynamic real-time monitoring system, patent filled with Em@systec France, submitted in December 2008 (Brevet déposé à l'I.N.P.I. – France – en date du 10 décembre 2008 sous le numéro de demande 0858450, n° 1000043030, réf. 8 E50 BT FR 1 - Em@systec).

✓ PhD supervision

1. Mehdi OUNISSI, Decoding the Black Box: Enhancing Interpretability and Trust in AI for Biomedical Imaging—A Step Towards Responsible Artificial Intelligence, Sorbonne University, ED130 (EDITE) Doctoral School - Computer Science, Telecommunication And Electronics, Oct. 2024.
2. Gabriel Alexandro JIMENEZ GARAY, Representation Learning and Data-Centric Approaches in Computational Pathology. Instantiation to Alzheimer's Disease, Sorbonne University, ED130 (EDITE) Doctoral School - Computer Science, Telecommunication and Electronics, Sept. 2024.
3. Ms. Oumeima LAIFA, A joint Discriminative-Generative approach for tumour angiogenesis assessment in Computational Pathology, Sorbonne University, co-supervision with Dr Hwee Kuan LEE, BII/A*STAR Singapore, Sept. 2019.
4. M. Lamine TRAORE, Semantic Modelling of a Histopathology Image Exploration and Analysis Tool, PhD of the University Pierre and Marie Curie, ED393 Doctoral School - Public Health: epidemiology and biomedical informatics, Dec. 2017.
5. M. Bassem BEN CHEIKH, Graph-based Mathematical Morphology for the Characterization of the Spatial Organization of Histological Structures in High-Content Images: Application to Tumor Microenvironment in Breast Cancer, University Pierre and Marie Curie, EDITE ED130 Doctoral School - Computer Science, Telecommunication and Electronics, Sept 2017.
6. M. Olivier MORERE, Deep Learning Compact and Invariant Image Descriptors for Instance Retrieval, PhD of the University Pierre and Marie Curie, EDITE, ED130 Doctoral School - Computer Science, Telecommunication and Electronics, June 2016.
7. Ms. Sreetama BASU, Automatic Analysis of Neuronal Morphology: Detection, Modeling and Reconstruction, NUS PhD of the National University of Singapore, March 2015.
8. M. Antoine FAGETTE, Dense Crowd Analysis, PhD of the University Pierre and Marie Curie, EDITE Doctoral School Computer Science, Telecommunication Electronics, June 2014.
9. M. Stéphane RIGAUD, Analysis-Synthesis Approach for Neurosphere Modelisation Under Phase-Contrast Microscopy, PhD of the University Pierre and Marie Curie (EDITE, ED130 Doctoral School - Computer Science, Telecommunication and Electronics), March 2014.
10. M. Humayun IRSHAD, Automated Mitosis Detection in Color and Multi-spectral High-Content Images in Histopathology: Application to Breast Cancer Grading in Digital Pathology, PhD of University Joseph Fourier – Grenoble 1, Jan 2014.
11. M. Antoine VEILLARD, Kernel Methods for the Incorporation of Prior-Knowledge into Support Vector Machines, PhD of the National University of Singapore, Dec. 2012.
12. Ms. Roxana Oana TEODORESCU, Parkinson's Disease Prognosis using Diffusion Tensor Imaging Features Fusion / Pronostic de la maladie de Parkinson basé sur la fusion des caractéristiques d'Images par Résonance Magnétique de Diffusion, joint PhD of the University of Franche-Comté and Politehnica University of Timisoara, Apr. 2011.
13. Ms. Adina Eunice TUTAC (ép. BRANICI), Formal Representation and Reasoning for Microscopic Medical Image-Based Prognosis. Application to Breast Cancer Grading / Représentation et Raisonnement Formels pour le Pronostic basé sur l'Imagerie Médicale Microscopique. Application à la Graduation du Cancer du Sein, joint PhD of the University of Franche-Comté and Politehnica University of Timisoara, Timisoara, Oct. 2010.
14. Ms. Eugenia MINCA, Surveillance des systèmes de production en utilisant les réseaux de Petri flous. Application à la E-maintenance des systèmes flexibles de production, joint PhD of the University of Franche-Comté and Univ. Valahia Targoviste, Sept. 2004.
15. M. Nicolas PALLUAT, Méthodologie de surveillance dynamique à l'aide des réseaux neuro-flous temporels, University of Franche-Comté, Jan. 2006.
16. M. Ryad ZEMOURI, Contribution à la surveillance des systèmes à l'aide des réseaux de neurones dynamiques : Application à la e-maintenance, University Franche-Comté, Nov. 2003.

✓ Habilitation to Supervise Research (HDR – Habilitations à Diriger des Recherches)

Loménie, N. Habilitation (Habilitation à Diriger des Recherches), Structural and Geometric Analysis of Radiometric Images by Visual Perception Modeling with application to digital pathology, 11th of June 2013, Paris. Jury: Stuart Russel (Univ. Berkeley), Catherine Garbay (CNRS, Univ. Grenoble), Isabelle Bloch (Telecom ParisTech), Laurent Najman (ESIEE & Univ. Marne-la-Vallée), Valérie Gouet-Brunet (Inst. Géographique National), Olivier Lézoray (Univ.

Caen), Racoceanu, D. (Univ. Pierre et Marie Curie - CNRS), Laurent Wendling (Univ. Paris Descartes), Georges Stamon (Univ. Paris Descartes).

✓ International Conferences, Symposiums, Special Sessions and Workshops organization

1. MICCAI 2022, Singapore, Organization Committee
2. MICCAI 2021, Strasbourg, France, Organization Committee
3. MICCAI 2020, Lima, Peru – Latin America, General Chair
4. ECDP 2018, European Conf. of Digital Pathology, Helsinki, Finland, Scientific committee.
5. First University of Waterloo - Sorbonne University seminar: " Crystalizing Transdisciplinary innovation in Health Engineering ", 9-11 May, 2016.
6. MITOS & ATYPIA @ ICPR 2014, International Medical Benchmark entitled: Mitosis Detection and Atypia assessment in Breast Cancer Histological Images, in the framework of ICPR 2014, 22nd International Conf. Pattern Recognition, 24-28 Aug 2014, Stockholm, Sweden.
7. ECDP 2014, European Conference of Digital Pathology, Scientific and Organization Committees, 18-20 June 2014, Paris.
8. IJCNN 2013 Special Session: "Computational Intelligence in Bioimage Informatics" (IJCNN-CIBII2013), International Joint Conference on Neural Newtorks, Dallas, TX, USA, August 4-9, 2013
9. SinFra 2012 - Singaporean-French IPAL Symposium, 15-16 October 2012, University Pierre and Marie Curie and Institut Mines-Telecom, Paris - Scientific invited Sessions, Racoceanu, D. and M. Mokhtari, General Chairs.
10. MITOS @ ICPR 2012, International Medical Benchmark entitled: Mitosis Detection in Breast Cancer Histological Images, initiative of IPAL in collaboration with the SME TRIBVN (Châtillon, France), Hôpital de la Pitié-Salpêtrière (Paris, France) and Ohio State University (US), in the framework of ICPR 2012, 21st International Conference on Pattern Recognition, 11-15 Nov., 2012, Tsukuba, Japan.
11. IJCNN 2011 Special Session "Consciousness-driven vision: toward a breakthrough in bio-inspired computer vision", 31 July – 5 Aug 2011, US.
12. SFBI 2011 – Singaporean - French BioImaging Seminar 2011, 24-25 February. 2011, Biopolis, Singapore (Keynote – Mathias Fink, ESPC, Paris).
13. ICT'2010, EU-ASEAN Cooperation opportunities, Networking Session jointly organized by IPAL and SEACOOP, Bruxelles, Belgium, 27-29 Sept. 2010.
14. Image Understanding - an important step toward Visual Cognition, 2010 IEEE World Congress on Computional Intelligence (WCCI 2010), Special Session, Chairs: Racoceanu, D. and Huang, C. H., 18-23 July, 2010, Barcelona, Spain.
15. SinFra'09, Singaporean-French IPAL Symposium, 18–20 Feb. 2009, Singapore, - Tutorials & Scientific Sessions, Racoceanu, D., Lim, J. H., Leow, W. K., General Chairs (Keynote Joseph Sifakis, 2007 ACM Turing award winner)
16. "Ontology and Context Related Medical Image Distributed Intelligent Access" - ONCO-MEDIA special session at the JAMIT (Japanese Society of Medical Imaging Technology) Annual Meeting, 20th of July 2007, Tsukuba, Japan, chairs: Nakai, T. & Racoceanu, D.
17. Special Session - Medical Image Retrieval - AIRS 2006 – Asian Information Retrieval Symposium, 18 Oct. 2006, Singapore, organizers – Racoceanu, D., publications issued in Lecture Notes for Computer Science (LNCS)
18. SFBI'06, 1st Singaporean-French Biomedical Imaging workshop, 12-13 October 2006, Biopolis, Singapore, Organizing Committee Chairs: Racoceanu, D., Benoît-Cattin, H., organized with SBIC (Singapore BioImaging Consortium) and CREATIS/INSA Lyon.

✓ Regional, National and International Disseminations

1. Ilias Sarbout, Dan Milea, Daniel Racoceanu - Deep Learning for Navigation of the Visually Impaired using Synthetic Data from Blind Digital Twins, Journées Scientifiques Inria "Handicap, perte d'autonomie & numérique", 19-20 Nov. 2024, Paris ; France.
2. Groupe de travail (GT) composé des membres de la Commission d'Évaluation (CE) suivants : Soraya Arias, Michel Bergmann, Fabien Campillo, Marie-Agnes Enard, Christian Fabre, Frédérick Garcia, Benjamin Guedj, Emmanuel Jeannot (rédacteur), Giovanni Neglia, Diane Peurichard,

Daniel Racoceanu, Benoît Sagot (rédacteur) et Gaelle Tworkowski, Réflexions sur l'usage de l'IA générative pour les métiers de la recherche, document validé par la Commission d'Évaluation Inria en juillet 2024.

3. Racoceanu, D., Singapore: Asia's Leading Location for Biomedical and Cosmetic Industries, Guest Editor's Note - FCCS Focus Magazine, French Chamber of Commerce, Singapore, January 2014, pp. 3.
4. IPAL: Four more years for the French-Singaporean lab IPAL, CNRS international magazine, No.22, July 2011.
5. Le laboratoire franco-singapourien poursuit son essor, Journal CNRS, no 256, May 2011.
6. IPAL: A Decade-Long Success Story, FCCS Focus Magazine, French Chamber of Commerce, Singapore, a Living Lab, summer 2010, pp. 22,23.
7. Singapore, New Research Hub, Around the world, Horizons, CNRS International Magazine n° 18 July 2010, pp. 34

- ✓ **Miscelaneous**

1. IPAL – success stories showcase (2011) of the SECAS EU project funded by the European Commission under the FP7 ICT program; Eutema, a research consultancy from Austria, coordinates SECAS. Other partners include Optimat (UK), National ICT Australia (NICTA) and Singapore Management University (SMU).