Daniel RACOCEANU

Computational BioMedical Images, Machine & Deep Learning, Artificial Intelligence.

SCIENTIFIC PUBLICATIONS / PUBLICATIONS SCIENTIFIQUES











Journals with reviewing committee

- 1. Fraggetta F., L'Imperio V., Ameisen D., Carvalho R., Leh S, Kiehl T-R., 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, https://doi.org/10.3390/diagnostics11112167.
- 2. Songhui D., Yinli T., Wanming H., Jiaxin H., Ricardo L., Zhicheng Z., Yaoqin X., Xiu N., Fa Z., Racoceanu D., Wenjian Q. (2021). Weakly Supervised Framework for Cancer Regions Detection of Hepatocellular Carcinoma in Whole-Slide Pathologic Images Based on Multiscale Attention Convolutional Neural Network, American Journal of Pathology, December 08, 2021, https://doi.org/10.1016/j.ajpath.2021.11.009
- 3. 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.
- 4. Zemouri, R., Zerhouni, N., Racoceanu, D. (2019). Deep Learning in the Biomedical Applications: Recent and Future Status, Appl. Sci., 9(8), 1526; doi:10.3390/app9081526.
- 5. Saha, M., Chakraborty, C., Racoceanu, D. (2018) Efficient Deep Learning Model for Mitosis Detection using Breast Histopathology Images, Computerized Medical Imaging and Graphics, 64:29-40. doi: 10.1016/j.compmedimag.2017.12.001, Epub 2017 Dec 16.
- 6. Ehteshami Bejnordi, B. et al. (2017). Diagnostic Assessment of Deep Learning Algorithms for Detection of Lymph Node Metastases in Women with Breast Cancer, JAMA, 318(22): 2199-2210. doi:10.1001/jama.2017.14585.
- 7. Clatici, V. G., Racoceanu, D., Dalle, C., Voicu, C., Thomas-Aragones, L., Servando E. Marron, S. E., Wollina, U., Fica, S. (2017). Perceived Age and Life Style. The specific Contributions of Seven Factors Involved in Health and Beauty. Maedica - A Journal Of Clinical Medicine, 12(3): 112-122.
- 8. Traore, L., Kergosien, Y., Racoceanu, D. (2017). Bridging the semantic gap between diagnostic histopathology and image analysis. Stud Health Technol Inform, 235: 436-440.
- 9. Marin, L., Ezziane, M., Comperat, E., Mozer, P., Cancel-Tassin, G., Coté, J.-F., Racoceanu, D., Boudghene, F., Lucidarme, O., Cussenot, O., Renard Penna, R. (2017). Comparison of semi-automated and manual methods to measure the volume of prostate cancer on magnetic resonance imaging. Diagnostic and Interventional Imaging, 98(5): 423-428; doi: 10.1016/j.diii.2017.02.004.
- 10. Sirinukunwattana, K., Pluim, J., Chen, H., Qi, X., Heng, P-A., Bo, Y., Wang, L.Y., Matuszewski, B., Bruni, E., Sanchez, U., Böhm, A. Ronneberger, O., Ben Cheikh, B., Racoceanu, D., Philipp Kainz, P., Pfeiffer, M., Urschler, M., Snead, D., & Rajpoot, N. (2016). Gland Segmentation in Colon Histology Images: The GlaS Challenge Contest. Medical Image Analysis, 35: 489-502.
- 11. Traore, L., Daniel, C., Jaulent, M-C., Schrader, T., Racoceanu, D., Kergosien, Y. (2016). Sustainable formal representation of breast cancer grading histopathological knowledge, The Diagnostic Pathology Journal, 2: 109.
- 12. Racoceanu, D., Ameisen, D., Veillard, A., Ben Cheikh, B. Attieh, E., Brezillon, P., Yunès, J.-B., Temerson, J.-M., Toubiana, L., Verger, V., Pomerol, J.-F., Klossa, J., Lallemand, F., Constant, P., Capron, F., Guettier, C., Phan, N., Bertheau P. (2016). Towards efficient

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- 13. Ben Cheikh, B., Bor-Angelier, C., Racoceanu, D. (2016). Graph-Based approach for spatial heterogenity analysis in tumour microenvironment. *Diagnostic Pathology J.*, 8: 228.
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- 16. Racoceanu D, Capron F. (2016). Pathobiology: Journal of Immunopathology, Molecular and Cellular Biology, 83(2-3):148-155, DOI: 10.1159/000443964 PMID: 27100713
- Racoceanu, D., Capron, F., (2015). Towards Semantic-Driven High-Content Image Analysis. An Operational Instantiation for Mitosis Detection in Digital Histopathology. Computerized Medical Imaging and Graphics, 2: 2-15. DOI: 10.1016/j.compmedimag.2014.09.004.
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- 25. Loménie, N., Racoceanu, D. (2012). Point set morphological filtering and semantic spatial configuration modeling: applications to microscopic image and bio-structure analysis. *Pattern Recognition*, 45(8): 2894-2911. ISSN: 0031-3203. DOI: 10.1016/j.patcog.2012.01.021.
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- data. Artificial Intelligence in Medicine, Knowledge Discovery and Computer-Based Decision Support in Biomedicine, 50(1): 13-21. ISSN: 0933-3657.
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Book Chapters

- 1. Daniel Racoceanu, Gabriel Jimenez Garay (2022). Computational Pathology for Brain Disorders, O. Colliot (Ed.), Machine Learning for Brain Disorders, Springer (in press)
- 2. Racoceanu D., Ounissi, M., Kergosien, Y. (2022). Explicabilité en Intelligence Artificielle; vers une IA Responsable. Instantiation dans le domaine de la santé, Techniques de l'Ingénieur (in press).
- 3. Zemouri, R., Racoceanu, D. (2021). Innovative Deep Learning Approach for Biomedical Data Instantiation and Visualization, in Deep Learning for Biomedical Data Analysis: Techniques, Approaches and Application, Springer, DOI: 10.1007/978-3-030-71676-9 8.

- 4. 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 Intell. and Soft Computing, pp 157-172.
- 5. Lomenie, 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.
- 6. Teodorescu, R. O., Cretu, V. I., Racoceanu, D. (2011). 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, InTech, ISBN: 978-953-307-475-7.
- 7. 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.
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Edited books, symposium proceedings, scientific journals special issues

- Daniel Racoceanu, Leo Joskowicz, Diana Mateus, Danail Stoyanov, Anne Martel, Purang Abolmaesumi (Eds), Int. Journal of Computer Assisted Radiology and Surgery: IJCARS - MICCAI 2020 Special Issue (2021)
- Daniel Racoceanu, Leo Joskowicz, Diana Mateus, S. Kevin Zhou, Danail Stoyanov, Maria Zuluaga, Anne Martel, Purang Abolmaesumi (Eds), Medical Image Analysis: MedIA MICCAI 2020 Special Issue (2021)
- Martel, A.L., Abolmaesumi, P., Stoyanov, D., Mateus, D., Zuluaga, M.A., Zhou, S.K., Racoceanu, D., 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):
 - o Part I: https://www.springer.com/gp/book/9783030597092
 - o Part II: https://www.springer.com/gp/book/9783030597122
 - o Part III: https://www.springer.com/gp/book/9783030597153
 - o Part IV: https://www.springer.com/gp/book/9783030597184
 - o Part V: https://www.springer.com/fr/book/9783030597214
 - o Part VI: https://www.springer.com/ap/book/9783030597245
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- 4. 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)
- 5. 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.
- Roux, L., Racoceanu, D., (Eds.) Mitosis detection in breast cancer histological images: An ICPR 2012 contest, Journal of Pathology Informatics, special issue, vol. 4, issue 1, 30 May 2013, ISSN: 2153-3539.
- 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.
- 8. Leow, W. K., Feng, D., Li, H., Racoceanu, D. (Eds.), SinFra'09 Singaporean-French IPAL Symposium, Proceedings of the symposium with the selected publications, **World Scientific**, ISBN: 978-981-4277-55-6(CD) / 981-4277-55-X(CD), 18–20 February 2009, Fusionopolis & Institute for Mathematical Sciences, Singapore.
- 9. 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.

International Conferences Invitee

- 1. Racoceanu, D. (2021). Explainable IA: towards a Responsible AI, **keynote speaker**, **SIPAIM 2021** Int. Symposium Medical Information Processing Analysis, Campinas, Brazil.
- Racoceanu, D. (2019). Vessel detection for angiogenesis quantification deep learning & marked point process, ECDP 2019 – 15th European Congress on Digital Pathology, Warwick, UK, 10-13 April, 2019.
- 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.
- 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.
- 5. Racoceanu, D. (2017). Integrative Computational Pathology and beyond ..., Keynote speaker, **Digital Pathology and Image Analysis**, San Antonio, USA, November 15-16, 2017.
- 6. Racoceanu, D. (2016). Integrative digital pathology: semantics and scalable imaging methods, **DIGITALPath Europe 2016**, London, 18-19 May 2016.
- 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.
- 8. Racoceanu, D. (2015). Semantics, micro-semiology and scalability in future Digital Pathology, **Digital Pathology Congress**, 21-22 September 2015, Kuala Lumpur, Malaysia.
- 9. 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.
- 10. Racoceanu, D. (2015). Semantic-Driven Image Exploration for WSI. Scalability for big data, Information Technology in Digital Pathology, **AIDPATH EU**, May 2015, Madrid, Spain.
- 11. Racoceanu, D. (2014). Semantic-Driven Image Exploration for WSI. Scalability for big data, **Digital Pathology Congress**, 4-5 December 2014, London, UK.
- 12. Racoceanu, D. (2013). Symbolic cognitive approaches using prior knowledge and prior shapes for whole slide image understanding. Roadmap and perspectives inspired by a long-run french-singaporean collaboration, 3rd European Conference on Whole Slide Imaging and Analysis, Heidelberg, Germany, 29-30 Nov. 2013.
- Racoceanu, D. (2010). MICO: A COgnitive virtual MIcroscopy platform for histopathological Whole Slide Images Analysis. Application to Breast Cancer Grading, The 9th Korea-Singapore Joint Workshop on Bioinformatics, Conference Invitee, 23 February 2010, KAIST - Korea Adv. Instit. Science and Technology, Daejeon, South Korea.
- 14. Racoceanu, D. (2008). Translational Breast Cancer Grading System by Automatic Analysis of Histopathology Images in a Virtual Microscope Framework, "Romanian Scientific Diaspora" Conference, Exploratory Workshop: Bioinformatics, Conference Invitee, 17 19 Sept. 2008, Bucharest, Romania.
- 15. Racoceanu, D. (2008). Image Based Reasoning using Medical Knowledge to improve Diagnosis Assistance. Showcases: Early Detection of Brain stroke from brain CT, Histopathology Imaging-based Automatic Breast Cancer Grading, First International Symposium on ICT For Health ICT4Health 2008, Keynote Lecture, February 29th -1st March 2008, Ateneo de Manila University, Manila, Philippines.
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International Communications with Proceedings

- 1. Arslan, J., Luo, H., Lacroix, M., Dupré, P., Kumar, P., Hodgkinson, A., Dandou, S., Larive, R., Pignodel, C., Le Cam, L., Radulescu, O., Racoceanu, D. (2023). 3D reconstruction of H&E whole slide images in melanoma, **SPIE Medical Imaging**, San Diego, US.
- Jimenez, G., Mas, P., Kar, A., Ingrassia, L., Boluda, S., Benoit Delatour, B., Lev Stimmer, Daniel Racoceanu (2023). A meta-graph approach for analyzing whole slide histopathological images of human brain tissue with Alzheimer disease biomarkers, SPIE Medical Imaging, San Diego, US.
- Arslan, J., Kumar, P., Hodgkinson, A., Luo, H., Dandou, S., Lacroix, M., Dupré, P., Pignodel, C., Larive, R., Le Cam, L., Radulescu, O., Racoceanu, D. (2022) 3D reconstruction and mathematical modelling of whole slide images to elucidate resistance to the targeted therapy in melanoma, ICSB 2022 - The 21st International Conference on Systems Biology, Berlin, Germany.
- Jimenez G., Kar A., Ounissi M., Ingrassia L., Boluda S., Delatour B., Stimmer L., Racoceanu D. (2022). Visual Deep Learning-Based Explanation for Neuritic Plaques Segmentation in Alzheimer's Disease Using Weakly Annotated Whole Slide Histopathological Images. In: Wang, L., Dou, Q., Fletcher, P.T., Speidel, S., Li, S. (eds) Medical Image Computing and Computer Assisted Intervention MICCAI 2022. Lecture Notes in Computer Science, vol 13432. Springer, Cham. https://doi.org/10.1007/978-3-031-16434-7 33
- 5. Ingrassia, L., Racoceanu, D., Boluda, S., Delatour, B., Stimmer, L. (2022) Machine-learning histopathological segmentation and quantification of tauopathies in classic vs rapidly progressive forms of Alzheimer's Disease, Forum of the Federation of European Neuroscience Societies **FENS 2022**, Paris, France.
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- 7. Kar A., Jimenez G., Ounissi M., Stimmer L., Delatour B., Racoceanu D. (2022). A deep learning framework for stratification of Alzheimer's disease patients using whole slide histopathological brain tissue images, European Conference on Digital Pathology **ECDP 2022**, Berlin, Germany.
- 8. Manouskova, K., Abadie, V., Ounissi, M., Jimenez, G., Stimmer, L., Delatour, B., Durrleman, S., Racoceanu, D. (2022) Tau protein discrete aggregates in Alzheimer's disease: neuritic plaques and tangles detection and segmentation using computational histopathology, **SPIE Medical Imaging**, San Diego, USA.
- 9. Trujillano F., Gonzalez, J., Saito, C., Flores, A., Racoceanu, D. (2021). Corn Crops Identification using Multispectral Images from Unmanned Aircraft Systems, IEEE IGARSS, International Geoscience and Remote Sensing Symposium, Brussels, Belgium.
- 10. Huang, C.-H, Racoceanu, D. (2020), Enhanced Methods for Lymphocyte Detection and Segmentation on H&E Stained Images using eXclusive Autoencoders, Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'20), Montréal, Québec, Canada.
- 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.
- 13. Marin, L., Casado, F., Racoceanu, D. (2018), An integrative computational pathology approach to classify prostate cancer. Combining phenotypical, genomic and tumor microenvironment figures using deep learning, **European Congress on Digital Pathology**, Helsinki, Finland, May 29th June 1st, 2018.
- 14. Trujillano, F., Flores, A., Saito, C., Balcazar, M., Racoceanu, D. (2018) Corn classification using Deep Learning with UAV imagery. An operational proof of concept, IEEE Colombian Conf. on Applications in Computational Intelligence, Medellín, Colombia.

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- Laifa, O., Le Guillou-Buffello, D., Racoceanu, D., (2017), Tumor angiogenesis assessment using multi-fluorescent scans on murine slices by Markov Random Field framework, Proc.
 SPIE 10572, 13th International Conference on Medical Information Processing and Analysis; 1057208 (2017); https://doi.org/10.1117/12.2285924.
- Marin, L., Racoceanu, D., Renard Penna, R., Ezziane, M. (2017), Prostate Cancer: Computer Aided-Diagnosis on Multiparametric MRI, Proc. SPIE 10572, 13th International Conference on Medical Information Processing and Analysis, 1057213 (17 November 2017); https://doi.org/10.1117/12.2283404.
- 18. Venâncio, R., Ben Cheikh, B., Coron, A., Saegusa-Beecroft, E., Machi, J., Racoceanu, D., Bridal, L., Mamou, J. (2017), Relating Quantitative Ultrasound Parameters to Histologic Texture Parameters in Cancerous Human Lymph Nodes, 2017 IEEE Internat. Ultrasonics Symposium, Washington D.C., USA. https://doi.org/10.1109/ULTSYM.2017.8092764.
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- 117. Racoceanu, D., El Moudni, A., Zerhouni, N., Ferney, M. (1994). Use of an homographic transformation jointly to the singular perturbation for the study of Markov chains. Application to the operational safety study, **IEEE Int. Conference on Robotics and Automation IEEE ICRA**, San Diego, USA.
- 118. Racoceanu, D., El Moudni, A., Zerhouni, N., Ferney, M. (1994). A Markov chain singular perturbation resolution, congress 1-Mathmod Vienna, Austria.

Invited Lectures

- 1. Racoceanu, D. (2019). Tumor Heterogeneity Analysis, Indexing and Simulation in Computational Pathology, **Shenzhen Institute of Advanced Technology** (SIAT), Shenzhen, China, 17 Oct. 2019.
- 2. Racoceanu, D. (2019). Computational Pathology: A Path Ahead, Café de la Neuroinformatique, **Institut du Cerveau et de la Moelle épinière** (ICM), Paris, France.
- 3. 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.
- 4. 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 Univ. of Peru**, 17 May 2018.
- 5. Racoceanu, D. (2017). Integrative Digital Pathology and beyond, Invited Speaker, **National University of Colombia**, Bogota, Colombia, 9th of May 2017.
- 6. 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.

- 7. 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.
- 8. Racoceanu, D. (2014). Towards the future of Digital Pathology, Invited Talk, Massachusetts General Hospital MGH, Boston, MA, USA, 17 Sept. 2014.
- 9. 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.
- Racoceanu, D. (2014). Major research results in cognitive multi-scale exploration of high content images at IPAL/BMIU, Invited Speaker, Bioinformatics Institute BII - A*STAR, Singapore, 7th of February 2014.
- 11. Racoceanu, D. (2013). Exploration cognitive symbolique des images biomédicales haut contenu. Application à la gradation des cancers en histopathologie et au suivi de cellules souches par recalage dynamique entre l'analyse 2D et la synthèse 3D, Invited Speaker, LIRMM UMR CNRS University of Montpellier II, 24 Sept. 2013, Montpellier, France.
- 12. Racoceanu, D. (2013). Cognitive virtual microscopy for breast cancer grading in histopathology Whole Slide Image exploration using a symbolic cognitive vision approach, Invited Speaker, **Centre de Recherche des Cordeliers**, **UMR INSERM**, 8 Apr. 2013, Paris, France.
- 13. Racoceanu, D. (2013). Symbolic visual approaches using prior knowledge and shapes for high content microscopic images exploration. Roadmap and perspectives inspired by a long-run french-singaporean collaboration, Invited Speaker, INRIA/CNRS-Sophia Antipolis, Ayin (INRIA) and Morpheme (INRIA/CNRS) research teams, invited talk, 18 Feb, 2013, Sophia-Antipolis, France.
- 14. Racoceanu, D. (2013). Approches cognitives symboliques et connaissances/formes a priori pour l'imagerie microscopique haut contenu. Perspectives à travers des projets franco-singapouriens, Invited Speaker, LTSI, French National Institute of Health and Medical Research, INSERM UMR, University Rennes 1, 14 Feb. 2013, Rennes, France.
- 15. Racoceanu, D. (2013). Approches visuelles sémantiques en histopathologie, Invited Speaker, Unité BioTICLA Equipe IMAGIN' Biologie et Thérapies Innovantes des Cancers Localement Agressifs EA 4656 de l'Université de Caen Basse-Normandie, IFR 146 ICORE Centre de Lutte Contre le Cancer François Baclesse, 12 Feb 2013, Caen, France.
- 16. Racoceanu, D. (2012). Imagerie microscopique haut débit / haut contenu et ses perspectives à travers deux applications développées dans des projets francosingapouriens, Invited Speaker, Research center of the Brain and Spine Institute (CRICM Centre de Recherche de l'Institut du Cerveau et de la Moelle épinière), 17 Oct 2012, Paris, France.
- 17. Racoceanu, D. (2011). Exploration d'une lame virtuelle en utilisant une approche in vitro in silico in cognito: Application à la gradation du cancer du sein en histopathologie, Invited Speaker, Functional Imaging Laboratory (LIF), French National Institute of Health and Medical Research (INSERM), Faculty of Medicine Pierre and Marie Curie Site Pitié-Salpêtrière, Dec 1st, 2011, Paris, France.
- 18. Racoceanu, D. (2010). Presentation of the International French-Singaporean Collaboration IPAL – Image & Pervasive Access Lab – UMI CNRS, French-Singaporean Entrepreneurships R&D Committee Opening Meeting, Invited speaker, Organized by the French Chamber of Commerce in Singapore (FCCS) & French Embassy in Singapore, 14 January 2010, Singapore.
- 19. Racoceanu, D. (2009). IPAL researches in ontology driven virtual microscopy for breast cancer grading, **European COST Action IC0604 Euro-Telepath**, Management Committee and 6/7th Working Groups Meetings, **Conference Invited Expert**, 03-04 Dec. 2009, Lausanne, Switzerland.
- 20. Racoceanu, D. (2008). Image Based Reasoning Systems using Medical Knowledge for Diagnosis Assistance, Invited Speaker, **Institute of Molecular and Cell Biology** (IMCB), Biopolis, **Agency for Science, Technology and Research** (A*STAR), Singapore.

- 21. Racoceanu, D. (2005). Monitoring Approach Using Recurrent Radial Basis Function Neural Networks and Neuro-Fuzzy Systems, Invited Speaker, Department of Computer Science, School of Computing, **National University of Singapore**, 7 Dec. 2005.
- 22. Racoceanu, D., Zerhouni, N. (2005). Dynamic Monitoring Systems using Recurrent Neural Networks and Neuro-Fuzzy Systems. Nemosys Project, Invited Speaker, Artificial Intelligence Department, **Tsinghua University**, **Beijing**, China, 17 October 2005.

Oral communications without proceedings

- Kumar, P., Arslan, J., Hodgkinson, A., Luo, H., Dandou, S., Lacroix, M., Dupré, P., Pignodel, C., Larive, R. M., Lacroix, M., Le Cam, L., Racoceanu, D., et Radulescu, O. (2022). "Data driven mechanistic modeling of oxygen distribution and hypoxia profile in tumor microenvironment", Compsyscan22: A complex systems approach to cancer understanding, Lyon, France.
- Janan Arslan, Laurent Le Cam, Matthieu Lacroix, Emmanuel Faure, Pierrick Dupré, Christine Pignodel, Pawan Kumar, Sarah Dandou, Anukriti Srivastava, Ovidiu Radulescu, Daniel Racoceanu. (2022). Introducing [MALMO]: Mathematical Approaches to Modelling Metabolic Plasticity and Heterogeneity in Melanoma, RITS - Recherche en Imagerie et Technologies pour la Santé, Brest, France.
- 3. Descamps, E., Giaimo-Pechim, D., Racoceanu, D., Isnard-Amat, C. (2021) Recherche Action Participative: Engagement des patients et du public dans la prise en charge de la douleur chronique, évaluation continue des INM et traçabilité clinique basée sur l'apprentissage profond de données hétérogènes, 21ème Congrès national de la SFETD (Société Française d'Étude et de Traitement de la Douleur), Montpellier, France.
- 4. Racoceanu, D. Basu, S., Salas, D. coordination (CISI) seminar on Numerical reliability of computation codes in medical imaging, Paris, France, April 27, 2016.
- 5. Racoceanu, D., Massive data in Digital Patholgy: insights about semantics/microsemiology and scalable imaging methods, "Cycle de vie des images en microscopie: les enjeux techniques", workshop organized by the CNRS with the networks CALCUL, DEVLOG, RBDD, RCCM, REMISOL, RTMFM, 15th of Dec. 2015, Paris, France.
- 6. Ben Cheikh, B., Racoceanu, D., Graph-based mathematical morphology for the characterization of the spatial heterogeneity of tumours: A new approach for tumour growth modeling, workshop DYnamique et COntrôle des Croissances TUmorales, Rouen, France, 30th of Nov 2015.
- 7. Ben Cheikh B., Bertheau P., Racoceanu D., Preliminary approach for crypt detection in Inflammatory Bowel Disease, Workshop du GDR ISIS (Information, Signal, Image et ViSion) French CNRS scientific organization on Information, Signal, Image and Vision: Analyse de tissu biologique et histopathologie numérique, Paris, France, 23rd of June 2015.
- 8. Racoceanu, D., Whole Slide Image exploration using a symbolic cognitive vision approach, Grenoble Interdisciplinary Days 2013, Health & ICT, Nanohealth and Devices, University Grenoble Alpes, Septembre 26-27, 2013.
- 9. Racoceanu, D., High content biomedical image exploration using semantic, prior shapes and modelling/synthesis approaches, CNRS-NSTDA workshop, 12-13 March 2013, Bangkok, Thailand.
- Racoceanu, D., The challenge of digital pathology: experience of the MICO (cognitive microscopy) project related to breast cancer grading, Workshop on Bioimage Informatics 2013, 23-24 Jan. 2013, Singapore
- 11. MICO ANR TecSan project consortium, Digital Histopathology, Breast Cancer and WSI Exploration, Catel communication Carrefour de la Télésanté, 20 oct. 2011, Paris.
- 12. Racoceanu, D., NUS & CNRS initiative at IPAL: Medical imaging joint researches related to Breast cancer grading and Intelligent vision system for neural stem cells tracking, 3rd NUS SoC Vietnam Workshop, 4-5th March 2011, Hanoi University of Science & Technology, Hanoi, Vietnam.
- 13. Racoceanu, D., IPAL-CNRS, the international joint laboratory initiative in Singapore, ICT'2010, EU-ASEAN Cooperation opportunities, Networking Session jointly organized by IPAL UMI CNRS and SEACOOP, Bruxelles, Belgium, 27-29 Sept. 2010.

- 14. Nicolas Loménie, Racoceanu, D., IPAL overview Image & Pervasive Access Lab, 7th ICT-Asia regional conference, 15 & 16 March 2010, Keio University Tokyo Japan.
- 15. Nicolas Loménie, Roux, L., Racoceanu, D., "MICO: plateforme de MIcroscopie virtuelle COgnitive", Imagerie pour la Biologie / Analyse et Traitement en Microscopie Fonctionnelle du Vivant, séminaire GdR ISIS (Information, Signal, Image et ViSion) French CNRS scientific organization on Information, Signal, Image and Vision GdR 2588 (Microscopie Fonctionnelle du Vivant) French CNRS cientific organization on functional in vivo microscopy, 16 Nov. 2009, Paris, France.
- 16. Tutac, A. E., Racoceanu, D., Loménie, N., Roux, L., Balensi, D., Putti, T. C., Knowledge Representation and Reasoning for Breast Cancer Grading in Cognitive Virtual Microscope Framework, A*STAR Scientific Conference 2009, 28-29 Oct. 2009, Singapore.
- 17. Teodorescu, R. O., Racoceanu, D., Chan, L. L., Prognosis of Parkinson's disease, A*STAR Scientific Conference 2009, 28-29 Oct. 2009, Biopolis, Singapore.
- 18. Tutac, A. E., Racoceanu, D., Loménie, N., Roux, L., Putti, T. C., Cretu, V. I., "Breast Cancer Grading Knowledge Modeling and Reasoning for Cognitive Virtual Microscopy", National Institutes of Health NIH Inter-Institute Workshop on Optical Diagnostic and Biophotonic Methods from Bench to Bedside, Bethesda, USA, 1-2 Oct 2009.
- 19. Loménie, N. Racoceanu, D., Medical Image Research Topics in relation to VPH EU framework @ IPAL Image & Pervasive Access Lab, 20th anniversary of ERCIM Meeting, the European Research Consortium for Informatics and Mathematics, 28 May 2009, Paris.
- 20. Racoceanu, D., Breast cancer grading in a virtual microscope platform, Third TecSan Franco-Taiwanese Biomedical Workshop, 27 March 2009, National Taiwan University, Taipei, Taiwan.
- 21. Racoceanu, D., Content-based medical image retrieval and IPAL medical applications. State of the art and trends toward clinical application, 2009 France-Taiwan Seminar on Bilateral Cooperation in Health Technologies, 26 March 2009, National Kaohsiung University, Kaohsiung, Taiwan.
- 22. Racoceanu, D., Tutac, A. E., Xiong, W., Dalle, J. R., Huang, C. H., Roux, L., Leow, W. K., Veillard, A., Lim, J. H., Thomas Puttti, Teh Ming, A virtual microscope framework for breast cancer grading, A*STAR CCO workshop in Computer Aided Diagnosis, Treatment and Prediction, Biopolis, Singapore, 15 January 2009.
- 23. Dalle, J. R., Racoceanu, D., Leow, W. K., Contribution to an Automated Breast Cancer Grading System, First International Symposium on ICT for Health ICT4Health 2008, February 29th -1st March 2008, Ateneo de Manila University, Manila, Philippines.
- 24. Brezillon, P., Racoceanu, D., Contextualized diagnosis model: Example of the breast cancer, First International Symposium on ICT for Health ICT4Health 2008, February 29th 1st March 2008, Ateneo de Manila University, Philippines.
- 25. Liu, J., Lim, J. H., Racoceanu, D., Wing Kee Damon Wong, Huiqi Li, Leaking detection for Medical image segmentation, First International Symposium on ICT For Health (ICT4Health 2008), February 29th-1st March 2008, Ateneo de Manila University, Manila, Philippines.
- 26. Camarasu, S., Benoit-Cattin, H., Montagnat, J., Racoceanu, D., Content-Based Medical Image Indexing and Retrieval on Grids, First International Symposium on ICT For Health (ICT4Health 2008), February 29th-1st March 2008, Ateneo de Manila University, Philippines.
- 27. Brezillon, P., Racoceanu, D., Contextual Approach in Image Processing. Application to cerebral MRI, ICT ONCO-MEDIA MIST 2007 workshop, Hualien-Taipei, Wan-Fang Hospital, Taipei, Taiwan, November 19-21, 2007.
- 28. Racoceanu, D., ONtology and COntext related MEdical image Distributed Intel. Access, first assessment of the project, the fifth ICT-Asia seminar, 18-19 Nov. 2007, Taipei, Taiwan.
- 29. Racoceanu, D., Dalle, J. R., Bo, Q., Chan, L. L., Leow, W. K., Lim, J. H., Tan S. P. J., Knowledge Based Approach for Stroke Diagnosis, ONCO-MEDIA MIST'2007 workshop, International Medical Informatics Symposium in Taiwan, Hualien-Taipei, Wan-Fang Hospital, Taipei, Taiwan, November, 15-19, 2007.
- 30. Racoceanu, D., Lacoste, C., Lim, J. H., Chevallet, J. P., Xiong, W., Bridging the Semantic Gap using a UMLS Knowledge-based Medical Image Retrieval Approach with

- Application on CLEF Medical Image Database, 1st Singaporean-French Biomedical Workshop, 12-13 Oct. 2006, Singapore.
- 31. Lacoste, C., Chevallet, J. P., Lim, J. H., Xiong, W., Racoceanu, D., Le Thi Hoang, D., Teodorescu, R. O., Vuillenemot, N., IPAL Knowledge-based Medical Image Retrieval in ImageCLEFmed 2006, Cross Language Evaluation Forum 2006 International Workshop, Medical Image Track, 20-22 Sept 2006, Alicante, Spain.
- 32. Lacoste, C., Chevallet, J. P., Lim, J. H., Racoceanu, D., Medical Image Retrieval based on Knowledge-Assisted Text and Image Indexing, SBIC Singaporean Bio-Imaging Consortium Medical Imaging Workshop, 8 Aug. 2006, Singapore.
- 33. Racoceanu, D., Fusion text/image for medical case indexing, Fourth ICT-Asia ISERE Meeting: Inter-media Semantic Extraction & Reasoning, National Institute of Informatics (NII), 5-7 June 2006, Tokyo, Japan.
- 34. Racoceanu, D., Content-Based Medical Image Retrieval the Onco-Media project, TRUMA 2005: International Workshop on Task-Relevant Ubiquitous Media Access, associated with the Third ISERE Meeting: Inter-media Semantic Extraction & Reasoning, 18-20 December 2005, National Taiwan University, Taipei, Taiwan.
- 35. Racoceanu, D., Diagnostic et pronostic à l'aide des techniques de l'intelligence artificielle, communication dans le cadre de la journée technique organisée par l'Institut de Productique de Besançon, intitulée : « Les atouts de la e-maintenance pour la performance industrielle », Cegelec S.A., Belfort, France, 19 May 2005.
- 36. Ghernaut, A., Racoceanu, D., Zerhouni, N., Surveillance des systèmes mécatroniques par une approche maintenance qualité, réunion commune aux GTs MACOD (maintenance coopérative distribuée) et AMOEP (évaluation de performances), journées du GdR MACS, Clermont-Ferrand, France, 30 mars -1 er Apr. 2005.
- 37. Zemouri, R., Racoceanu, D., Zerhouni, N., Coupling the dynamic memory with the static memory of a neural network for the diagnosis by pattern recognition, DX-2004, 15th International Workshop on Principles of Diagnosis, Carcassonne, France, 23-25 June 2004.
- 38. Zemouri, R., Racoceanu, D., Zerhouni, N., Contribution à la surveillance des systèmes de production à l'aide des réseaux de neurones dynamiques : Application à l'emaintenance, journées du GdR MACS, Bordeaux, France, 16-17 Oct. 2003.
- 39. Zemouri, R., Racoceanu, D., Zerhouni, N., Prédiction des séries temporelles par le réseau Recurrent Radial Basis Function, Xlèmes Journées neurosciences et sciences de l'ingénieur, NSI'2002 Club EEA, L'Agelonde, La Londe Les Maures (Var), France, 2002.
- 40. Zemouri, R., Racoceanu, D., Zerhouni, N., Application des réseaux de neurones récurrents (RRBF) à la détection dynamique de dégradations, Réunion du GRP Groupement de Recherche en Productique, groupe de travail ASSF Automatisation et Systèmes Sûrs de Fonctionnement, Grenoble, France, 21-22 March 2002.
- 41. Zemouri, R., Racoceanu, D. et Zerhouni, N., Evaluation des performances d'un atelier de maintenance de PEUGEOT CITROEN AUTOMOBILES, SITE DE Sochaux France, Proc. of the Symposium Internat. Maintenance Industrielle, SIMI'2001, 2001, Alger, Algeria.

Other production

✓ Editorial activities

- o ISTE-WILEY Editorial Organization, Computer Science and Information Technology
- o ISTE-WILEY Editorial Organization, Bioengineering and Health Science

✓ International Journal Reviewing

- Medical Image Analysis (MedIA)
- o IEEE PAMI IEEE Transactions on Pattern Analysis and Machine Intelligence
- o **IEEE TIP** IEEE Transactions on Image Processing
- o **IEEE TMI** Transactions on Medical Image
- o IEEE TBME IEEE Transactions on Biomedical Engineering
- o **CMIG** (Elsevier) Computerized Medical Imaging and Graphics
- o **ACM** (Association for Computing Machinery) Computing Reviews
- IMIA Yearbook Medical Informatics

✓ Patents and copyrights

- 1. Mitosis Detector Mitosis detector for histopathology, Copyright (declaration logicielle) CNRS n° DL 05963-01 for the CNRS International Research Unit IPAL (UMI 2955), 2013.
- 2. A 3-Dimensional Tracking Method for Time-lapse Suspension Cell and Cell sphere Image Acquisition using Phase Contrast Microscopy, US Patent Application filed on Nov. 2012.
- 3. 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.
- 4. 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 16th of December 2010, approved on the 13th of May 2011.
- 5. 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 of 14th of May 2010).
- 6. 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. Ms. **Oumeima LAIFA**, A joint Discriminative-Generative approach for tumour angiogenesis assessment in Computational Pathology, thèse Sorbonne Université, en coencadrement SU BII/A*STAR, defended sept. 2019.
- 2. 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, PhD oral defense: 8 Dec. 2017, Paris, Jury: Prof. Patrick Brezillon (president), Prof. Jacques Demongeot (reviewer), Dr Bernard Gibaud (reviewer), Dr Charlotte Gardair, MD (examiner), Prof. Yannick Kergosien (supervisor), Prof. Daniel Racoceanu (supervisor).
- 3. 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, PhD of the University Pierre and Marie Curie, EDITE, ED130 Doctoral School Computer Science, Telecommunication and Electronics), PhD oral defense: 26 Sept 2017, Paris, Jury: Prof. Yannick Kergosien (president), Prof. Olivier Lezoray (reviewer), Prof. Peter Hufnagl (reviewer), Prof. Wiliam Puech (examiner), Prof. Daniel Racoceanu (supervisor).
- 4. 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), Paris, 8 June 2016, Jury: reviewers Bloch, G. (Univ. Lorraine), Muller, H. (Univ. Univ. of Applied Sc. Western Switzerland); examiners: Tome, N. (UPMC), Demongeot, J. (Univ. Joseph Fourier), supervisor: Racoceanu, D. (UPMC), co-sup.: A. Veillard (UPMC) and Chandresekhar, V. (A*STAR Singapore).
- 5. Ms. **Sreetama BASU**, Automatic Analysis of Neuronal Morphology: Detection, Modeling and Reconstruction, NUS PhD of the National University of Singapore, Singapore, 24 March 2015, Jury: reviewers: Descombes, X. (DR CNRS Sophia Antipolis), Tan, C. L. (NUS), examiners: Brown, M. (NUS), Hsu, W. (NUS), co-supervisor: Racoceanu, D. (UPMC), supervisor: Ooi, W. T. (NUS).
- 6. M. Antoine FAGETTE, Dense Crowd Analysis, PhD of the University Pierre and Marie Curie (EDITE, ED130 Doctoral School - Computer Science, Telecommunication and Electronics), Paris, 13 June 2014, Jury: Reviewers: Wong, L. (NUS, FOE) and Laptev, I., Members: Moutarde, F. (Mines ParisTech (Ecole Nationale Supérieure des Mines, Paris), Cord, M. (UPMC), Courty, N. (Univ. Bretagne Sud), Supervisor: Racoceanu, D. (UPMC), co-supervisor: Dufour, J. Y. (THALES).
- 7. 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), Paris, 10th of

- March 2014, Jury: reviewers: Descombes, X. (DR CNRS Sophia Antipolis) and Bouthemy, P. (DR INRIA Rennes), examiners: Demouly, V. (UPMC), Boudier, T. (UPMC), supervisor: Racoceanu, D. (UPMC), co-supervisor: Lim, J. H. (I2R/A*STAR), advisor: Loménie, N. (UPD).
- 8. 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, Grenoble, 20 Jan 2014, Jury: Reviewers: Prof. William PUECH, University Montpellier 2 Sciences et Techniques, Rajpoot, N., Warwick University UK, Examiners: Chassery, J. M., CNRS UJF Grenoble, Gouaillard, A., Temasys Communications, Singapore, Capron, F., Hôpital de la Pitié Salpêtrière, Paris, Klossa, J., TRIBVN, Châtillon, Supervisors: Racoceanu, D., Sorbonne Universités, UPMC, Roux, L., UJF Grenoble.
- 9. M. **Antoine VEILLARD**, Kernel Methods for the Incorporation of Prior-Knowledge into Support Vector Machines, PhD of the National University of Singapore, Singapore 11 Dec. 2012, Jury: Bloch, G. (reviewer), Brown, M. (reviewer), Lee, M. L. (president), Bressan, S. (co-supervisor), Racoceanu, D. (co-supervisor).
- 10. 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, 11 Apr. 2011, jury: Jannin, P. (reviewer), Ebrahimi, T. (reviewer), Müller, H. (president), Cretu, V. I. (co supervisor), Racoceanu, D. (co-supervisor), Zerhouni, N.
- 11. 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, 22 Oct. 2010, jury: Robu, N. (president), Roux, C. (reviewer), Müller, H. (reviewer), Cretu, V. I. (cosuperv), Racoceanu, D. (co-superv), Loménie, N. Zerhouni, N., Mihalas Gh., Klossa, J.
- 12. 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, 24 Sept. 2004, jury: I. Cucui (president), V. Manzu (reviewer), C. Sibertin-Blanc (reviewer), A. Dorin, Racoceanu, D. (co-supervisor), Zerhouni, N. (co-sup.), J. Cardoso.
- 13. M. **Nicolas PALLUAT**, Méthodologie de surveillance dynamique à l'aide des réseaux neuro-flous temporels, PhD of the Univeersity of Franche-Comté, 12 Jan. 2006, jury: C. Chu (president), P. Brézillon (reviewer), B. Ould-Bouamama (reviewer), Bourjault, A., J-M. Olive, Racoceanu, D. (co-supervisor), Zerhouni, N. (co-sup.), J-B Leger.
- 14. M. **Ryad ZEMOURI**, Contribution à la surveillance des systèmes à l'aide des réseaux de neurones dynamiques : Application à la e-maintenance, PhD University Franche-Comté, 28 Nov. 2003, jury: Bourjault, A. (pres), Hammad, D. (reviewer), Noyes, D. (reviewer), Faure, J. M., Racoceanu, D. (co-supervisor), Zerhouni, N. (co-sup.), Labourier, R.

✓ Habilitation to Supervise Researches

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. ISBI 2023, Internat. Symposium on Biomedical Imaging, Organizing Committee
- 2. **MICCAI 2022**, International Conference on Medical Image Computing and Computer Assisted Intervention, Organising Committee

- 3. **MICCAI 2021**, International Conference on Medical Image Computing and Computer Assisted Intervention, Organizing Committee
- 4. **MICCAI 2020**, International Conference on Medical Image Computing and Computer Assisted Intervention, Peru Latin America, **General Chair**
- 5. **ECDP 2018**, European Conf. of Digital Pathology, Helsinki, Finland, Scientific committee.
- 6. **First University of Waterloo Sorbonne University** seminar: "Crystalizing Transdisciplinary innovation in Health Engineering", 9-11 May, 2016.
- 7. 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.
- 8. **ECDP 2014**, European Conference of Digital Pathology, **Scientific and Organization Committees**, 18-20 June 2014, Paris.
- IJCNN 2013 Special Session: "Computational Intelligence in Bioimage Informatics" (IJCNN-CIBII2013), International Joint Conference on Neural Newtorks, Dallas, TX, USA, August 4-9, 2013
- 10. **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.
- 11. 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.
- 12. **IJCNN 2011** Special Session "Consciousness-driven vision: toward a breakthrough in bioinspired computer vision", 31 July 5 Aug 2011, US.
- 13. **SFBI 2011** Singaporean French Biolmaging Seminar 2011, 24-25 February. 2011, Biopolis, Singapore (Keynote Mathias Fink, ESPC, Paris).
- 14. **ICT'2010**, EU-ASEAN Cooperation opportunities, Networking Session jointly organized by IPAL and SEACOOP, Bruxelles, Belgium, 27-29 Sept. 2010.
- 15. 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.
- 16. **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)
- 17. "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.
- 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)
- 19. **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 Biolmaging Consortium) and CREATIS/INSA Lyon.

Regional, National and International Disseminations

- 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.
- 2. IPAL: Four more years for the French-Singaporean lab IPAL, **CNRS international magazine**, No.22, July 2011.
- 3. Le laboratoire franco-singapourien poursuit son essor, **Journal CNRS**, no 256, May 2011.

- 4. IPAL: A Decade-Long Success Story, FCCS Focus Magazine, French Chamber of Commerce, Singapore, a Living Lab, summer 2010, pp. 22,23.
- 5. Singapore, New Research Hub, Around the world, Horizons, **CNRS International Magazine** n° 18 July 2010, pp. 34

✓ Miscelaneous

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