Virginia Laura Ballarin - Curriculum Vitae

Personal Information

Name: Virginia Laura Ballarin
Date of birth: June 16th, 1959
Place of birth: Mar del Plata, Argentina
Nationality: Argentina
Marital Status: Married
Home Address: Urquiza 2669, Mar del Plata, Argentina
E-mail: vballari@fi.mdp.edu.ar, vballari@gmail.com
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Member of

- Co Chair of Women in Biomedical Engineering Committee of the IFMBE 2018 to 2021
- CORAL – Secretary General of the Latin America Council of Biomedical Engineering 2020 to 2023
- IEEE R9 EMBS WIE Representative 2021 to 2022
- Vice President of Argentinian IEEE Section 2022 and Past President EMBS Argentinian Chapter.
- SABI – Argentinean Society of Bioengineering Past President.
- SADIO Argentinean Society of Informatics
- Latin American Open Chair Matilda and Women in Engineering

Current activities

- **Full Professor**
  Department of Electronics
  School of Engineering
  Universidad Nacional de Mar del Plata
  Mar del Plata, Argentina
- **Director**
  Image Processing Lab
  ICYTE Institute of Scientific and Technological Research in Electronics
  Universidad Nacional de Mar del Plata
  Mar del Plata, Argentina
- **Director of the Bioengineering Ph. D. Program**
  School of Engineering
  Universidad Nacional de Mar del Plata
  Mar del Plata, Argentina
- **Co Chair of Women in Biomedical Engineering Committee**
  International Federation of Medical and Biological Engineering
  From 2018 to date
- **CORAL Secretary General**
  Latin America Council of Biomedical Engineering (CORAL) from 2020 to date
- **R9 EMBS WIE Representative** 2021 to date
- **Editor of the Argentinian Bioengineering Journal**
  Journal of Argentinian Bioengineering Society since 2015 to date
- **ICYTE Administrative Council Member**
  ICYTE Institute of Scientific and Technological Research in Electronics
  Universidad Nacional de Mar del Plata
  Mar del Plata, Argentina 2015 al 2022

Virginia Laura Ballarin - Curriculum Vitae

Education

PhD in Biological Sciences, Bioengineering orientation
Universidad Nacional del Tucumán, San Miguel de Tucumán, Argentina
Ph. D. Advisor: Dr. Maximo Eugenio Valentinuzzi.

Magister Scientae in Epistemology and Science Methodology
Universidad Nacional de Mar del Plata, Mar del Plata, Argentina

Electronics Engineer
Universidad Nacional de Mar del Plata, Mar del Plata, Argentina

Research experience

Full Professor - Research Category 1
Universidad Nacional de Mar del Plata from 1988 to date
ICYTE Institute of Scientific and Technological Research in Electronics
Research on biomedical image processing and pattern recognition.

Teaching experience

Full Professor
School of Engineering, Universidad Nacional de Mar del Plata
Department of Electronics 1997 to date
Courses: Probability, Statistics and Stochastic Processes and Digital Image Processing

Assistant Professor
School of Engineering, Universidad Nacional de Mar del Plata
Department of Electronics 1988 to 1996
Courses: Probability, Statistics and Stochastic Processes and Digital Image Processing

Visiting Professor
Computing Department
Universidad de Jaen, Spain.
From 2016 and 2022
Courses: Digital Image Processing

Visiting Professor
Bioengineering Department
Universidad Nacional de Entre Rios, Argentina
From September to November 2013
Courses: Biomedical Digital Image Processing

Visiting Professor
Electronics Department
Universidad Nacional de Cordoba, Argentina
From September to November 2010 and September to November 2012
Courses: Digital Image Processing

Visiting Professor
Bioengineering Department
Universidad Nacional de Tucuman, Argentina
From November 1997 and November 2000
Courses: Digital Image Processing

Teaching Assistant
Electronics Department - School of Engineering
UBA Universidad de Buenos Aires, Argentina
From July 1983 to December 1984
With duties in: Measurements and Instruments

Grants (last 10 years)

Period: 2022 to 2023
Grant: Research
Name: Segmentación, Análisis y Detección de Objetos en Imágenes y Secuencias de Videos
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr,: 15G643
Funding: $87,000

Period: 2020 to 2021
Grant: Research
Name: Segmentation, Analysis and Detection of objects and textures in Images and video sequences
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr,: 15G574
Funding: $78,940

Period: 2017 to 2020
Grant: Research
Name: Automatic Design of Operators of Mathematical Morphology for Color and Diffuse Images
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: National Agency of Scientific and Technological Promotion – FONCyT - Argentina
Project Nr,: PICT 20161169
Funding: $399,945

Period: 2018 to 2019
Grant: Research
Name: Automatic Design of Operators for Segmentation and Classification of Biomedical Images
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr,: 15/G504
Funding: $32,000

Period: 2016-2018
Grant: Research
Name: Automatic Design of Operators of Mathematical Morphology for Color and Diffuse Images
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr: 15/G445
Funding: $22,000

Period: 2014-2016
Grant: Research
Name: Segmentation and Analysis of Biomedical Images
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr: 15/G387
Funding: $21,000

Period: 2012-2014
Grant: Research
Name: Development of coatings and membranes of biotechnological interest by spraying hybrid organicinorganic solutions by sol-gel
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina

Position: Image Processing Area Director
Agency: CONICET
Project Nr: PIP-CONICET 11220110100434
Funding: $180,000

Period: 2012 to 2014
Grant: Research
Name: Mathematical Morphology and Texture Models for Image Feature Extraction
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr: 15G328
Funding: $25,000

Period: January 2011 to December 2013
Grant: Research
Name: Pattern Recognition Techniques Applied to Genomic Signal Processing
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Co-Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr.: 15/G299
Funding: A$ 1600
Director: Marcel Brun

Period: 2010 a 2012
Grant: Research
Name: Analysis and Classification of Biomedical Signals and Images
Place: Image Processing Lab, ICYTE, Universidad Nacional de Mar del Plata, Argentina
Position: Director
Agency: Universidad Nacional de Mar del Plata.
Project Nr.: 15G268
Funding: $ 26.000

Publications (Last 5 years)

Referred Journals

1. Clustering and classification software for sperm subpopulation analysis, Francisco Buchelly Imbachí, Lucía Zalazar, Juan Pastore, Anabella Nicolli, Alba Ledesma, Federico Hozbor, Andreina Cesari and Virginia Ballarin. Computer Methods in Biomechanics and Biomedical Engineering: Imaging & Visualization https://doi.org/10.1080/21681163.2021.2012831. ISSN: 21681163 (Print), 21681171(Online) January 2022.
2. Analisis comparativo del diseño automático de w-operadores en diferentes Espacios color, S. Guevara, A. Bouchet, V. Ballarin y J. Pastore Revista de Matemática Aplicada, Computacional e Industrial Ed.: Society for Industrial and Applied Mathematics (SIAM) Vol 8 pp 657-661. ISSN 2314-3282 (2021).
3. Intuitionistic fuzzy set and fuzzy mathematical morphology applied to color leukocytes segmentation Agustina Bouchet, Susana Montes, Virginia Ballarin and Irene Díaz. Signal, Image and Video Processing https://doi.org/10.1007/s11760-019-01586-2. ISSN: 1863-1703 (Print) 1863-1711 (Online) April 2020.
4. Segmentation of Exudates in Fundus Images Applying Color Mathematical Morphology, J. Pastore, A. Bouchet, C. Ordoñez, M. Brun and V. Ballarin. Proceedings of SPIE Springer Verlag doi: doi: 10.1117/12.2581133 (2020)
5. Automatic design of color W-operators to segment white blood cells in images of acute lymphoblastic leukemia, Susana Guevara, Juan I. Pastore y Virginia L. Ballarin. Revista Argentina de Bioingeniería, Sociedad Argentina de Bioingeniería (SABI), 24 (4), pp. 98–102. Noviembre, 2020. ISSN 2591-376X.
6. Early detection of peritoneal dialysis complications through convolutional neural networks, Diego S. Comas, Gustavo J. Meschino, Virginia L. Ballarin, Jerónimo Aguilera Díaz, Carlos G. Musso, Héctor Rivera, Fernando Plazzotta, Luis Algranati y Daniel Luna. Revista Argentina de Bioingeniería, Sociedad Argentina de Bioingeniería (SABI), 24 (2), pp. 58–63. Mayo, 2020. ISSN 2591-376X.
7. Diseño automático de un filtro para extracción de bordes en imágenes binarias ruidosas utilizando análisis discriminante lineal, Emilio Robalino, Susana Guevara, Agustina Bouchet, Juan I. Pastore Marcel Brun Y Virginia Ballarin Revista de Matemática Aplicada, Computacional e Industrial Ed.: Society For Industrial and Applied Mathematics (SIAM) Vol 7 pp 549-553. ISSN 2314-3282 (2019)

8. Objective evaluation of ram and buck sperm motility by using novel sperm tracker software, F. Buchelly Imbachí, L. Zalazar , J.I. Pastore, M.B. Greco, M. Iniesta-Cuerda, J.J. Garde, A.J. Soler, V. Ballarin and A. Cesari. Reproduction http://dx.doi.org/10.1530/REP-17-0755 ISSN: 1741-7899 2018.
9. Compensatory fuzzy mathematical morphology, Bouchet, A., Pastore, J.I., Brun, M. et Ballarin, V.L. Signal, Image and Video Processing. No. 59 Vol.11 pp. 1–8. DOI 10.1007/s11760-017-1058. ISSN: 1863-1711 2017.
10. Analysis of genetic association using Hierarchical Clustering and Cluster Validation Indices, I. Pagnuco, J. I Pastore, G. Abras, M. Brun and V. Ballarin, Genomics, Oct;109(5-6):438-445. doi: 10.1016/j.ygeno.2017.
11. Microscope cell color images segmentation by fuzzy morphological reconstruction, A. Bouchet ; J. I. Pastore ; M. Brun ; V. L. Ballarin. SPIE Proceedings Digital Pathology. Vol. 10160 http://dx.doi.org/10.1117/12.2256921
12. Discovering knowledge from data clustering using automatically-defined interval type-2 fuzzy predicates, D. Comas, G. Meschino, A. Nowe and V. Ballarin. Expert Systems With Applications (2017), pp. 136-150 (10.1016/j.eswa.2016.10.018) ISSN: 0957-4174.
13. SiO2-CaO-P2O5 (58S) sol gel glass applied onto surgical grade stainless steel by spray technique: morphological characterization by digital image processing, S. Omar, J. Pastore, A. Bouchet, S. Pellice, V. Ballarín, S. Ceré, and J. Ballarre. Biomedical Glasses No. 2 pp. 10–18 2016. ISSN: 2299-3932.
11. Processing of microCT implant-bone systems images using Fuzzy Mathematical Morphology. A Bouchet, J Pastore, L Colabella, S Omar, A Cisilino, J Ballarre, V. Ballarin. Journal of Physics doi:10.1088/1742-6596/705/1/012055. ISSN 1742-6588 (Print) ISSN 1742-6596 (Online), 2016.
12. New Windows based Color Morphological Operators for Biomedical Image Processing. J. Pastore, A. Bouchet, M. Brun and V. Ballarin. Journal of Physics doi:10.1088/1742-6596/705/1/012023. ISSN 1742-6588 (Print) ISSN 1742-6596 (Online), 2016
13. Digital image processing techniques applied to pressure analysis and morphological features extraction in footprints. F J Buchelly, D Mayorca, V Ballarín and J Pastor. Journal of Physics doi:10.1088/1742-6596/705/1/012020. ISSN 1742-6588 (Print) ISSN 1742-6596 (Online), 2016.
14. Analysis of genetic association in Listeria and Diabetes using Hierarchical Clustering and Silhouette Index. I. Pagnuco, J Pastore, G. Abras, M. Brun and V Ballarin. Journal of Physics doi:10.1088/1742- 6596/705/1/012002. ISSN 1742-6588 (Print) ISSN 1742-6596 (Online), 2016.
15. Automatic design of interpretable fuzzy predicate systems for clustering using Self-Organizing Map, Gustavo J. Meschino, Diego S. Comas, Virginia L. Ballarin, Adriana G. Scandurra y Lucía I. Passoni. Neurocomputing (Elsevier). Vol. 147 (0): pp. 47-59 2015. ISSN: 0925-2312.

Book Chapters

1. *Linguistic Mathematical Morphology w-operators in Fuzzy Color Space,* Juan I. Pastore, Virginia L. Ballarin and Rafael Espin Andrade Computing for Business Intelligence (2021) Studies in Computational Intelligence 953, https://doi.org/10.1007/978-3-030-73819-8_15. Springer Berlin Heidelberg. ISBN 978-3-6425-3736-3.
2. *New Rough Sets by Influence Zones Morphological Concept*, Juan I. Pastore, Agustina Bouchet, and Virginia L. Ballarin, Soft Computing for Business Intelligence (2014): pp. 81-99. Ed. R. A. Espin Andrade, R. Bello Pérez, Á. Cobo, J. Marx Gómez and A. Racet Valdés. Springer Berlin Heidelberg. ISBN 978-3-6425-3736-3.
3. *Type-2 Fuzzy Logic in Decision Support Systems,* D. Comas, J. Pastore, A. Bouchet, V. Ballarin and G. Meschino, Soft Computing for Business Intelligence (2014): pp. 267-280. Ed. R. A. Espin Andrade, R. Bello Pérez, Á. Cobo, J. Marx Gómez and A. Racet Valdés. Springer Berlin Heidelberg. ISBN 978-3-6425-3736-3.

International Conferences

1. Interpreting magnetic resonance images by means of fuzzy memberships functions, D.S. Comas, G.J. Meschino, and V.L. Ballarin. 4th International Conference on Biomedical and Health Informatics ICBHI 2021, (IFMBE) 10 al 12 de Noviembre, 2021. Seul, Korea.
2. Convolutional Neural Networks based on transfer-learning for pathologies detection in chest X-ray, L. Simón Gonzalez, D.S. Comas, and V.L. Ballarin. 4th International Conference on Biomedical and Health Informatics ICBHI 2021, (IFMBE) 10 al 12 de Noviembre, 2021. Seul, Korea.
3. Segmentation of Exudates in Fundus Images Applying Color Mathematical Morphology. Juan I. Pastore, Agustina Bouchet, Cristian Ordoñez, Marcel Brun and Virginia Ballarin 16th International Symposium on Medical Information Processing and Analysis (SIPAIM 2020). Virtual meeting. Lima, Perú, 3 y 4 de octubre de 2020.

4. A comparative study of reinforcement learning algorithms applied to medical image registration, R. Isa Jara, J.I. Pastore and V.L.Ballarin. 3rd International Conference on Biomedical and Health Informatics ICBHI 2019, (IFMBE) 17 al 19 de Abril, 2019. Taipei, Taiwan.
5. Desarrollo de un módulo para el estudio de subpoblaciones de motilidad espermática integrado a un software CASA. F. Buchelly, L. Zalazar, J. Pastore1, A. Cesari and V. Ballarin. VIII Congreso Latinoamericano de Ingeniería Biomédica (CLAIB2019) 3 al 5 de Octubre de 2019, Cancun, Mexico.
6. Analysis and quantification of bone tissue around anodized zirconium implants. G. Abras, M. Katunar, J. Ballarre, V. Ballarin and J. Pastore. VIII Congreso Latinoamericano de Ingeniería Biomédica (CLAIB2019) 3 al 5 de Octubre de 2019, Cancun, Mexico.
7. Linguistic Mathematical Morphology w-operators in Fuzzy Color Space, Pastore, Juan I., Ballarin, Virginia L. and Espin Andrade Rafel, Computational Intelligence, Hibridization and Transdisciplinary Science EUREKA 2019, Universidad de Cohuila, Mexico 6 al 8 de Mayo 2019.
8. Mammographic density estimation through permutation entropy, Adriana Antonelli, Gustavo Meschino and Virginia Ballarin. World Congress on Medical Physics and Medical Engineering 2018 (IFMBE) 3 al 8 de Junio, 2018 Praga, Rep. Checa.
9. Sperm motility analysis: a novel algorithm for tracking image sequences, Gustavo Monte, Juan Ignacio Pastore, Lucia Zalazar, Andreina Cesari, Virginia Ballarin. World Congress on Medical Physics and Medical Engineering 2018 (IFMBE) 3 al 8 de Junio, 2018 Praga, Rep. Checa.
10. Smoke Detection Using Simplified Descriptors of Video Information. Gustavo Monte, Juan I. Pastore, Virginia Ballarin, Damian Marasco, Pablo.18th Annual International Conference on Industrial Technology (IEEE ICIT 2017). Organizado por Electronics Society (IES) of the Institute of Electrical and Electronics Engineers (IEEE). pp 1070-1075. ISBN: 978-1-5090-5319-3. March, 2017
11. Accreditation of Biomedical Engineering careers in Latin America: quality standards, quality practice, quality outcomes, V. Ballarin World Congress on Medical Physics and Medical Engineering 2018 (IFMBE) 3 al 8 de Junio, 2018 Praga, Rep. Checa.
12. Gray Scale Boundary Detection using Linguistic operators of the Mathematical Morphology, A. Bouchet, J. Pastore, V. Ballarin and R. Espin Andrade. Computational Intelligence, Hibridization and Transdisciplinary Science: Applications to Knowledge Management, Business Intelligence, and Decision Making. 1 al 3 de December 2016. Universidad Autonoma de Coihuila Mexico.
13. Microscope cell color images segmentation by fuzzy morphological reconstruction, 12th International Symposium on Medical Information Processing and Analysis, 101600O 5 to 7 December de 2016, Tandil, Argentina.
14. Voluminous and distributed data: clustering and knowledge extraction through fuzzy predicates, D. Comas, G. Meschino, V. Ballarin, L. Passoni. Computational Intelligence, Hibridization and Transdisciplinary Science: Applications to Knowledge Management, Business Intelligence, and Decision Making. 1 al 3 de December 2016. Universidad Autonoma de Coihuila Mexico.
15. Microscope cell color images segmentation by fuzzy morphological reconstruction, A. Bouchet, J. Pastore, M. Brun and V. Ballarin. 12th International Symposium on Medical Information Processing and Analysis, 5 to 7 December 2016 Tandil.
16. Color morphological reconstruction as a tool for microscope cell images J. Pastore, M. Brun, A. Bouchet and V. Ballarin. VII Congreso Latinoamericano de Ingeniería Biomédica (CLAIB2016) 26 al 28 de Octubre de 2016, Bucaramanga, Colombia.
17. Automatic tracking of flagellar rotation of bacteri, F. Buchelly Imbachí, A. Pedetta, J. Pastore, M. Herrera Seitz and V. Ballarin. VII Congreso Latinoamericano de Ingeniería Biomédica (CLAIB2016) 26 to 28 of October 2016, Bucaramanga, Colombia.
18. Improved Particle Swarm Optimization algorithm applied to rigid registration in medical images, R. Isa Jara, F. Buchelly, G. Meschino and V. Ballarin. VII Congreso Latinoamericano de Ingeniería Biomédica (CLAIB2016) 26 to 28 October 2016, Bucaramanga, Colombia.

Argentinean Conferences more than 25 in the last 5 years

Invited Talks (last 5 years)

1. Interpreting magnetic resonance images by means of fuzzy memberships functions, Conferencia Plenaria en la 4th International Conference on Biomedical and Health Informatics ICBHI 2021, Sociedad Coreana de Ingeniería Biomédica y la International Federation of Medical and Biological Engineering IFMBE. KOREA, November 2021.
2. Diagnostico: tomando ventaja del color en las Imágenes Médicas, Confenerencia Plenaria en la XIX Reunión de Trabajo en Procesamiento de la Informacion y Control RPIC 2021, Instituto de Automática de la Universidad Nacional de San Juan (UNSJ-CONICET), Noviembre 2021.

3. Data Mining vs Machine Learning: analyze data behavior or learn from them? V Summer School: Emerging Technologies to Support Health Care and Independent Living 2020, Universidad Pontificia Javeriana de Bogotá y International federation of Medical and Biological Engineering IFMBE, June 2021.
4. Data Analysis, Classification and Prediction: between data mining and artificial intelligence IV Summer School: Emerging Technologies to Support Health Care and Independent Living 2020, Universidad Pontificia Javeriana de Bogotá y International federation of Medical and Biological Engineering IFMBE, June 2020.
5. Scientific Societies: smoothing the way to accreditation programs, 3rd International Conference on Biomedical and Health Informatics ICBHI 2019, Chuan Yuang Christian University of Taiwan y International federation of Medical and Biological Engineering IFMBE. TAIWAN, Abril 2019.
6. Diagnosis Taking Advantage of Medical Color Images, VIII Congreso Latinoamericano de Ingeniería Biomédica (CLAIB2019) MEXICO, Octubre 2019.
7. Data analysis, classification and prediction: between data mining and artificial intelligence, III Summer School: Emerging Technologies to Support Health Care and Independent Living 2018, Universidad Pontificia Javeriana de Bogotá y International federation of Medical and Biological Engineering IFMBE, COLOMBIA, Junio 2019.
8. Morfología Matemática en Imágenes Médicas: desde la Resonancia Magnética a la Ingeniería de Tejidos, Universidad de la Republica URUGUAY. Junio 2017.
9. Microscopic image analysis using Mathematical Morphology, CLAIB 2016 Congreso Latinomaericano de Ingeniería Biomédica. Bucaramanga COLOMBIA. Octubre 2016.
10. From Compensatory Logic to Color Mathematical Morphology, Universidad Autónoma de Coahuila, Torreón MEXICO. Noviembre 2016.

Current training of human resources

1. Advisor of Ph.D. in Bioengineering student: Biof.. Susana Guevara Cruz from 2017 to date
2. Advisor of Ph.D. in Bioengineering student: Biof. Emilio Robalino Trujillo from 2017 to date

Past training of human resources (last 10 years)

1. Advisor of Ph.D. in Electronics Engineering of Ramiro Isa Jara, Universidad Nacional de Mar del Plata (2015-2019)
2. Advisor of Ph.D. in Electronics Engineering of Francisco Buchelly Imbachi, Universidad Nacional de Mar del Plata (2015-2020)
3. Advisor of Ph.D. in Electronics Engineering of Diego Sebastián Comas, Universidad Nacional de Mar del Plata (2011-2016)
4. Co-Advisor of Ph.D. in Electronics Engineering Inti Pagnuco, Universidad Nacional de Mar del Plata (2011- 2016)
5. Co-advisor of Ph.D. in Electronics Engineering Marco Benalcazar Palacios, Universidad Nacional de Mar del Plata (2010 - 2014)
6. Advisor of Ph.D. in Electronics Engineering Agustina Bouchet, Universidad Nacional de Mar del Plata, (2006-2010)
7. Advisor of Ph.D. in Electronics Engineering Mariela Azul Gonzalez, Universidad Nacional de Mar del Plata (2005-2008)
8. Advisor of Ph.D. in Medical Physics at the Balseiro Institute of the del Lic. Freddy Benalcazar Palacios. (2008).
9. Co-Advisor of Ph.D. in Electronics Engineering Eduardo Blotta, Universidad Nacional de Mar del Plata (2005- 2010).
10. Co-Advisor of Ph.D. in Electronics Engineering Juan Ignacio Pastore, Universidad Nacional de Mar del Plata (2005-2009)
11. Co-Advisor of Ph.D. in Electronics Engineering Gustavo Meschino, Universidad Nacional de Mar del Plata (2003-2008).

Advisor of more than 30 Graduate Electronics Engineering Thesis

Member of Thesis Defense Tribunals (last 10 years)

1. Ph. D. in Engineering, Technological University of Buenos Aires, Eng. Edgardo Antonio Comas, July 2020.
2. Ph. D. in Engineering, Computational Matemathic, Science School, UNCPBA, Eng. Hugo Luis Manterola, December 2018
3. Ph. D. in Bioengineering, School of Engineering, Universidad Nacional de Entre Rios, Bioing. Carolina

Tabering ,September 2018

4. Ph. D. in Engineering, FICH Universidad Nacional del Litoral, Eng. Javier Eduardo Diaz Zamboni, June 2018.
5. Ph. D. in Computational Matemathic, Faculta de Ciencias Exactas, UNCPBA, Eng. José Ignacio Orlando, August 2017.
6. Ph. D. in Computational Matemathic, Faculta de Ciencias Exactas, UNCPBA, Faculta de Ciencias Exactas, UNCPBA, Eng. Lucas Lovercio, April 2017.
7. Ph. D. in Engineering Computer Science, UBA Universidad de Buenos Aires, Lic. Sebastián Ubalde, March 2016.
8. Ph. D. in Engineering, Universidad Nacional del Sur, Eng. Gisella Noelia Revollo Sarmiento, March 2015.
9. Ph. D. in Engineering Computer Science, UBA Universidad de Buenos Aires, Lic. Norberto Gousias, December 2014.
10. Ph. D. in Engineering, Universidad Nacional del Sur, Eng. Natalia Verónica Revollo Sarmiento, December 2012.
11. Ph. D. in Engineering Control Systems, Universidad Nacional de San Juan, Eng. María Agustina Graces Correa, June 2011.
12. Ph. D. in Scinence and Technology, Universidad Nacional de General Sarmiento, Eng. Mario Mastriani, October 2011.
13. Ph. D. in Electronics Engineering, Universidad Nacional de Mar del Plata, Eng. Adriana Scandurra, December 2010.
14. Ph. D. in Medical Physics, Instituto Balseiro, CONEA, M. Sc. Roberto Isoardi, June 2010.
15. Ph. D. in Electronics Engineering, Universidad Nacional de Mar del Plata, Eng. Hernan Sendra, December 2009.
16. Ph. D. in Electronics Engineering, Universidad Nacional de Mar del Plata, Eng. David Petruzzi, November 2009.
17. Magister Scientae in Medical Physics, Instituto Balseiro, CONEA, Lic. Arnulfo Torres Ortiz, December 2008.
18. Magister Scientae in Medical Physics, Instituto Balseiro, CONEA, Lic. Freddy Benalcazar Palacios, December 2008.

Reviewer activity

Journals

Reviewer of several journals: IEEE Latin American, EURASIP Journal on Bioinformatics and Systems Biology Digital Signal Processing, Ed. Elsevier; MICRON, Ed. Elsevier; Pattern Recognition, Ed. Elsevier etc.

Conferences: Scientific Committee Member

1. Member of the Scientific Committee of CIARP Iberoamerican Congress on Pattern Recognition, Portugal March 2021.
2. President of the Scientific Committee of the XXII Argentinean Congress of Bioengineering and Clinical Engineering, Uruguay March 2020.
3. Member of the Scientific Committee of Latin America Conference in Biomedical Engineering CLAIB 2019, Mexico October 2019.
4. President of the Scientific Committee of the XXI Argentinean Congress of Bioengineering and Clinical Engineering, Cordoba October 2017.
5. Academic Coordinator of the Join International Summer School 2018 (CORAL, IFMBE, EMBS) Bogotá. June 2017.
6. President of the Scientific Committee of the XVII Argentinean Congress in Information Processing and Control, Mar del Plata September 2017.
7. Member of the Scientific Committee of Latin America Conference in Biomedical Engineering CLAIB 2016, Colombia October 2017.
8. General Chair of the XVIII Argentinean Congress of Bioengineering and Clinical Engineering, Mar del Plata September 2011.
9. Member of the Scientific Committee of CIARP Iberoamerican Congress on Pattern Recognition, from 2012.
10. Member of the Scientific Committee of RPIC Argentinean Congress in Information Processing and Control since 1998.

Membership of Evaluation Committees

Evaluator of Researchers and Projects in CONICET (National Scientific and Technical Research Council).

Evaluator of National Fund for Scientific and Technological Development CHILE.

Evaluator UBACyT Projects. Universidad de Buenos Aires.

Evaluator of FONCyT Projects Argentinean Agency for Science and Technology.

Accreditation of Careers

Evaluator for the National Commission for University Evaluation and Accreditation CONEAU MERCOSUR, Electronics Engineering grade and postgrade programs CNA, COLOMBIA, form 2018 to date

Evaluator for the National Commission for University Evaluation and Accreditation CONEAU MERCOSUR, Electronics Engineering programs, CNACU, BOLIVIA, 2010

Evaluator for the National Commission for University Evaluation and Accreditation CONEAU MERCOSUR, Electronics Engineering programs, ANAES PARAGUAY 2010 to 2018

Evaluator for the National Commission for University Evaluation and Accreditation, CONEAU MERCOSUR, Electronics Engineering programs, COMISIÓN AD-HOC URUGUAY 2010 to date

Evaluator for the National Commission for University Evaluation and Accreditation CONEAU, postgrade and grade programs 2008 to date