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CV outline: *Personal data* • *Education* • *Professional experience* • *Teaching experience* • *Distinctions & awards* • *Projects* • *Publications* • *Professional references*

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Full CV
Last updated: March 20, 2025

📋 Personal data

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Name:	Diego Hernán Peluffo-Ordóñez
Date of birth:	October 25, 1986. (Pasto, Colombia)
Nationality:	Colombian
Position:	Head & Founder
	SDAS Resarch Group
	(https://sdas-group.com)
Personal website:	https://diegopeluffo.com
Other sites	iD SC g in R CvLAC
Contact:	

Phone: (Morocco) +212665396851
(Also WhatsApp)
Email: diego.peluffo@sdas-group.com

ℹ️ Profile summary

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I was born in Pasto - Colombia in 1986. I received my degree in electronic engineering, Master's in industrial automation, and PhD in engineering from the Universidad Nacional de Colombia – Manizales, Colombia, in 2008, 2010 and 2013, respectively. In 2012, I undertook my doctoral internship at KU Leuven – Leuven, Belgium. From 2013 to 2014, I worked as a postdoctoral researcher at Université Catholique de Louvain – Louvain la-Neuve, Belgium. From 2014 to 2015, I worked as a lecturer at Universidad Cooperativa de Colombia - Pasto, Colombia. From 2015 to 2017, I worked as a researcher/professor at Universidad Técnica del Norte - Ecuador. From 2017 to 2020, I worked as a lecturer at the School of Mathematical and Computational Sciences from Yachay Tech University - Ecuador. From 2020 to 2022, I worked as a Consultant and Curriculum Author at deeplearning.ai. From 2022 to 2023, I worked as a Master's thesis advisor with the Artificial Intelligence Master's program from Universidad Internacional de La Rioja (UNIR) – Spain.

Currently, I am working as an assistant professor and researcher at the College of Computing (CC) from Mohammed VI Polytechnic University – Morocco. I am the founder and head of the SDAS Research Group. I work as an invited lecturer and an external researcher at Corporación Universitaria Autónoma de Nariño - Pasto, Colombia, invited lecturer and curriculum developer at Universidad Autónoma de Occidente - Cali, Colombia, and project lead and consultant at IDENAR - Pasto, Colombia. I am an external thesis advisor with PhD programs from Universidad de Granada - Spain, Universitat Politècnica de València - Spain, and Universidad Nacional de La Plata - Argentina. I am an external collaborator at Writing Lab from Tecnológico de Monterrey – Mexico. I have served as an organizing committee member (general chair, session chair, competitions chair) and a keynote speaker in several conferences. Also, I have served as a guest editor for the Computers and Electrical Engineering Journal.

I have worked on various medical, biological, and education applications involving complex, high-dimensional data analysis, and signal, image, and video analysis. At the theoretical research level, my main interests are spectral and kernel based methods for exploratory analysis and data representation.

CV outline: *Personal data* • *Education* • *Professional experience* • *Teaching experience* •
Distinctions & awards • *Projects* • *Publications* • *Professional references*

🎓 Education

2013: .... Doctorate in Engineering - Automatics.

Department of Electrical, Electronics and Computer Engineering.
Universidad Nacional de Colombia – Manizales.
PhD thesis: "Dynamic Spectral Clustering based on Kernels"
https://repositorio.unal.edu.co/handle/unal/19995

2009: .... Master's in Industrial Automation.

Department of Electrical, Electronic and Computer Engineering.
Universidad Nacional de Colombia – Manizales.
Master's thesis: "Comparative study of clustering methods for heartbeats of ECG signals"
https://repositorio.unal.edu.co/handle/unal/69982

2008: .... Electronic Engineering.

Department of Electrical, Electronic and Computer Engineering.
Universidad Nacional de Colombia – Manizales.

🏛 Professional experience

2020 - 2022 .... DeepLearning.AI - Palo Alto, California, USA.
Consultant/Curriculum author.
E-mail: hello@deeplearning.ai.

2021- 2022 .... IDENAR - Pasto, Colombia.
Consultant/Project lead.
E-mail: idenarsas@gmail.com.

2013 - 2014 .... Université Catholique de Louvain – Belgium.
Postdoctoral researcher.
Project promoters: Michel Verleysen and John A. Lee.
E-mail: michel.verleysen@uclouvain.be, john.lee@uclouvain.be.

2012 .... ESAT KU Leuven - Belgium.
Research intern. Visitor student.
Supervisor: Johan Suykens.
E-mail: Johan.Suykens@esat.kuleuven.be.

🖥 Teaching experience

2020 - Today .... Mohammed VI Polytechnic University – Morocco.
Assistant professor.
College of Computing.
Subjects: Machine learning, artificial intelligence, deep learning, time series analysis.
E-mail: msda.info@um6p.ma – Phone: +212 5 22929419.

2022 - Today . . . . Universidad Internacional de La Rioja (UNIR) – Spain.
Master's thesis advisor.
Artificial intelligence Master's program.
E-mail: info@unir.net – Phone:+34 941 209 743.

2017 - 2020 . . . . Yachay Tech University - Ecuador.
Lecturer.
School of Mathematical Sciences and information Technology.
Subjects: Software engineering, introduction to engineering, machine learning, algorithms.
E-mail: talentohumano@yachaytech.edu.ec – Phone: +593 6 2999130. Ext. 2630.

2016 - 2017 . . . . Universidad Técnica del Norte – Ecuador.
Researcher/Professor.
Faculty of Engineering in Applied Sciences. Electronic engineering program.
Subjects: Applied mathematics, signal analysis, digital systems.
E-mail: info@utn.edu.ec – Phone: +593 6 2997800. Ext. 7506.

2014 - 2016 . . . . Universidad Cooperativa de Colombia, sede Pasto – Colombia.
Researcher/Professor.
Faculty of Engineering. Industrial engineering program.
Subjects: Methods of study and communication, differential calculus and data processing.
E-mail: ami.pasto@ucc.edu.co – Phone: +57 2 7336706.

2014 - 2015 . . . . Universidad de Nariño – Colombia.
Lecturer.
Faculty of Engineering. Department of Electronic Engineering.
Subjects: Electromedical Science I, II, Data Processing, Biomedical Signal Processing.
E-mail: judiciales@udenar.edu.co – Phone: +57 2 7315440. Ext. 246.

2012: . . . . Universidad de Caldas. Manizales-Colombia.
Lecturer
Departament of Engineering. Mechatronics.
Subjects: Real time programming. Faculty of Engineering. E-mail: ucaldas@ucaldas.edu.co - Phone: +57 6 8781500 Ext: 12603.

2008 - 2012: . . . . Universidad Nacional de Colombia, sede Manizales – Colombia.
Lecturer.
Department of Electrical, Electronic and Computer Engineering.
Subjects: Digital Electronics, Signals and Systems, Matrix Algebra and Signals Theory.
E-mail: depelecco_man@unal.edu.co – Phone: +57 6 8879300. Ext. 55820.

Distinctions, awards and scholarships

2023: Best Paper - 6th International Conference on Applied Informatics – ICAI 2023.

2020: Mejor Artículo (Best Paper) - Track Sistemas Inteligentes at JIISIC 2020 (Jornadas Iberoamericanas de Ingeniería de Software e Ingeniería del Conocimiento).

2019: Best Researcher of the Year 2019 Award by The Computational Sciences Department from Yachay Tech University.

2015: Best conference paper at Symposium of Image, Signal Processing, and Artificial Vision - STSIVA 2015.

2013 - 2014 Grant for a postdoctoral stay at the Université Catholique de Louvain (Louvain la-Neuve, Belgium). DRedVis project, funded by the Belgian National Scientific Research Fund (FRS-FNRS).

2010 - 2012 Scholarship for doctoral studies. "Estudiantes sobresalientes de postgrado" scholarship program. Universidad Nacional de Colombia – Manizales.

2010: Meritorious master's thesis entitled "Comparative study of clustering methods for heartbeats of ECG signals". Supervisor: César Germán Castellanos-Domínguez. Universidad Nacional de Colombia – Manizales.

2009 - 2010 Scholarship for master's studies. "Estudiantes sobresalientes de postgrado" scholarship program. Universidad Nacional de Colombia – Manizales.

2008: Scholarship for postgraduate studies awarded for honorary undergraduate degree. Universidad Nacional de Colombia – Manizales.

2008: Honorary undergraduate degree in Electronic Engineering. Universidad Nacional de Colombia – Manizales.

2003: "Mejores Bachilleres (Outstanding high school students)" scholarship for university study at Universidad Nacional de Colombia. Given by Instituto Técnico Industrial Municipal. Pasto, Colombia.

Research & consulting projects/Software/Hardware/Databases

Find the full information about my research projects at
https://www.diegopeluffo.com/index.php?tabFile=projects.html.

2023 (Database): Víctor Asanza, Leandro L. Lorente-Leyva, Diego H. Peluffo-Ordóñez, Daniel Montoya, Kleber Gonzalez, MILimbEEG: A dataset of EEG signals related to upper and lower limb execution of motor and motor imagery tasks, https://doi.org/10.1016/j.dib.2023.109540.

2022 (Project): *Development of a video game for SMART FACTORY training [Desarrollo del Juego de Video denominado SMART FACTORY].* Project lead (Principal researcher). IDENAR – Colombia. Duration: 4 months.

2021 (Hardware): *Temperature and Speed Control Lab (TSC-Lab).* Certification: OSHWA UID EC000003. Country: Ecuador. Date: July 15, 2021.
Online certificate: https://certification.oshwa.org/ec000003.html

2021 (Hardware): *PHASE ENERGY METER 100A (2PEM-100A).* Certification: OSHWA UID EC000004. Country: Ecuador. Date: December 01, 2021.
Online certificate: https://certification.oshwa.org/ec000004.html

2021 (Project): *Development of a technological solution with remote access virtual laboratories, based on emerging technologies, as an internationally scalable business model, offering services to improve the quality of education [Desarrollo de una solución tecnológica con laboratorios virtuales de acceso remoto, basado en tecnologías emergentes, como modelo de negocio escalable a nivel internacional, de oferta por servicio para mejorar la calidad de la educación].* Project lead (Principal researcher). IDENAR – Colombia. Duration: 1 year.

2020 (Database): Jorge Parraga-Alava, Jorge Dario Moncayo-Nacaza, Javier Revelo-Fuelagán, Paul D. Rosero-Montalvo, Andrés Anaya-Isaza, Diego Hernán Peluffo-Ordóñez, A data set for electric power consumption forecasting based on socio-demographic features: Data from an area of southern Colombia PCSTCOL), https://doi.org/10.1016/j.dib.2020.105246.

2019 (Database): Paul D. Rosero-Montalvo, Diego Peluffo-Ordóñez, January 23, 2019, "Alcohol Detection in Drivers by Sensors and Computer Vision", IEEE Dataport,
doi: https://dx.doi.org/10.21227/mnja-3553.

2019 (Database): Edison A. Fuentes-Hernández, Paul D. Rosero-Montalvo, Diego Peluffo, March 29, 2019, "Footstep analysis using Pressure Sensors", IEEE Dataport,
doi: https://dx.doi.org/10.21227/kqm6-1877.

2018 (Project): *Spirometry database: SpiDB project.* Principal Researcher. Universidad del Cauca – Colombia. Duration: Ongoing.

2017 (Project): *Development of an interactive and effective methodology for Big Data visualization.* External researcher. University of Nariño – Colombia. Duration: 2 years.

2016 (Project): *Methodology of information visual analysis in Big Data.* Project director. Universidad Técnica del Norte – Ecuador. Reference: UTN-FICA-2016-0636 del 12/06/2016. Duration: 1 year.

2015 (Project): *"Análisis de oportunidades de fuentes energéticas alternativas en el departamento de Nariño (Analyisis of alternative energy sources at Nariño-Colombia)".* Universidad de Nariño – Colombia. Professional researcher. Duration: 6 months.

2015 (Project): *Modular design methodology for production plants.* Nariño–Colombia. Advisor. Duration: 1 year.

2015 (Project): *Low-cost prototype for biofeedback applications.* Nariño–Colombia. Advisor. Duration: 1 year.

2013-2014 (Project): *Dimensionality reduction and data visualization.* Post-doctoral researcher. UCL-Université Catholique de Louvain. Louvain la-Neuve, Belgium.

Memberships

- Head of the Smart Data Analysis Systems Group (SDAS Research Group https://sdas-group.com). 2018 – Today.

- *IEEE professional member.* 2014 – Today.

- *Machine Learning Group.* Post-doctoral researcher. Université Catholique de Louvain. Louvain la-Neuve, Belgium. 2013 – 2014.

- *Grupo de Control y Procesamiento Digital de Señales* (Signal processing group – GC&PDS). Researcher. Universidad Nacional de Colombia – Manizales. 2007 – 2012.

📖 Thesis advisory

More information at: https://diegopeluffo.com/index.php?tabFile=advisory.html.

Doctoral theses

1. **Doctoral thesis:** *Reconstrucción 3D de escenarios en tiempo real a partir de cámaras de tipo monocular empleando técnicas de inteligencia artificial [Real-time 3D reconstruction of scenarios from monocular cameras using artificial intelligence techniques]* by Erick Patricio Herrera-Granda. Advisor(s): Juan Carlos Torres, Diego Hernán Peluffo-Ordóñez, Universidad de Granada, Spain, 2024.
   Available from: https://digibug.ugr.es/handle/10481/90846

2. **Doctoral thesis:** *Diseño de sistemas inteligentes de realidad virtual para la monitorización de entornos en Smart Factory [Design of intelligent virtual reality systems for the monitoring of environments in Smart Factories Factory]* by Luis Omar Alpala. Advisor(s): Juan Carlos Torres, Diego Hernán Peluffo-Ordóñez, Universidad de Granada, Spain, 2023.
   Available from: https://digibug.ugr.es/handle/10481/85698

3. **Doctoral thesis:** *Modelo de fusión de datos orientado a la calidad de la información [Data fusion model oriented to information quality]* by Miguel Alberto Becerra-Botero. Advisor(s): Diego Hernán Peluffo-Ordóñez, Catalina Tobón-Zuluaga. Universidad de Medellín, Colombia, 2023.
   Available from: https://www.diegopeluffo.com/Theses/2023_PhD_Thesis_Miguel_Becerra.pdf

4. **Doctoral thesis:** *Sistema genérico de razonamiento basado en casos multi-clase como soporte al diagnóstico médico mediante técnicas de reconocimiento de patrones [Generic multi-class case-based reasoning system to support medical diagnosis by means of pattern recognition techniques]* by Xiomara Patricia Blanco-Valencia. Advisor(s): Diego Hernán Peluffo-Ordóñez, Juan Francisco de Paz Santana, Juan Manuel Corchado. Universidad de Salamanca, Spain, 2017.
   Available from: https://gredos.usal.es/handle/10366/135721

5. **Doctoral thesis (Ongoing):** *Generic kernel based formulation for Exploratory Data Analysis* by Yahya Aalaila. Advisor(s): Diego Hernán Peluffo-Ordóñez, Mohammed VI Polytechnic University, Morocco.

6. **Doctoral thesis (Ongoing):** *Generic divergence-based formulation for Exploratory Data Analysis* by Mouad ELHamdi. Advisor(s): Diego Hernán Peluffo-Ordóñez, Mohammed VI Polytechnic University, Morocco.

7. **Doctoral thesis (Ongoing):** *Interpretability in deep learning techniques for precision agriculture* by Hind Raki. Advisor(s): Diego Hernán Peluffo-Ordóñez, Mohammed VI Polytechnic University, Morocco.

8. **Doctoral thesis (Ongoing):** *Supervised kernel expectile-based data-driven approaches for tail risk estimation* by Sami Bamansour. Advisor(s): Diego Hernán Peluffo-Ordóñez, Mohammed VI Polytechnic University, Morocco.

9. **Doctoral thesis (Ongoing):** *Planificación de Operaciones Dinámica e Inteligente en Empresas Textiles Ecuatorianas: Contexto determinista e incierto [Dynamic and Intelligent Operations Planning in Ecuadorian Textile Companies: Deterministic and Uncertain Context]* by Leandro Leonardo Lorente-Leyva. Advisor(s): María del Mar Alemany Díaz, Diego Hernán Peluffo-Ordóñez. Universitat Politècnica de València, Spain.

10. **Doctoral thesis (Ongoing):** *Métodos y modelos multi-objetivo para optimizar la gestión de cadenas de suministro de pequeñas y medianas empresas agroalimentarias ecuatorianas [Multi-objective methods and models to optimize the management of supply chains of small and medium-sized Ecuadorian agrifood companies]* by Israel David Herrera-Granda. Advisor(s): María del Mar Alemany Díaz, Diego Hernán Peluffo-Ordóñez. Universitat Politècnica de València, Spain.

11. **Doctoral thesis (Ongoing):** *I-SDR: Método generalizado de reducción de atributos mediante la visualización interactiva de los datos [I-SDR: Interactive Spectral Dimensionality Reduction]* by Cosme MacArthur Ortega-Bustamante. Advisor(s): Waldo Hasperué, Diego Hernán Peluffo-Ordóñez. Universidad Nacional de La Plata, Argentina.

12. **Doctoral thesis (Ongoing):** *Método de reconstrucción cardiaca 3D como solución al problema inverso de la electrocardiografía para la generación de mapas de potenciales superficiales cardiacos a partir de un arreglo denso de electrocardiogramas (ECGs) y geometría específica del torso-corazón [3D cardiac reconstruction method as a solution to the inverse problem of electrocardiography for the generation of cardiac surface potential maps from a dense array of electrocardiograms (ECGs) and specific torso-heart geometry]* by Dagoberto Mayorca-Torres. Advisor(s): Alejandro José León Salas, Diego Hernán Peluffo-Ordoñez, Universidad de Granada, Spain.

Master's theses

1. **Master's thesis:** *Kernel Expectile Regression Estimator: Introduction And Link To Neural Network* by Sami Bamansour. Advisor(s): MKHADRI Abdallah, Diego Hernán Peluffo-Ordóñez. Université Cadi Ayyad – Morocco, 2021. Available from:
https://www.diegopeluffo.com/Theses/2022_Masters_Thesis_Sami_Bamansour.pdf

2. **Master's thesis:** *Combining Ab-initio Computation with Experiments for Designing and Understanding Phosphosilicate Solid (SPO) Compounds as an Electrode Material for Lithium-ion Batteries* by by Ayoub Taktour. Advisor(s): Diego Hernán Peluffo-Ordóñez, Mouad DAHBI. Université Mohammed VI Polytechnique – Morocco, 2022. Available from:
https://www.diegopeluffo.com/Theses/2022_Masters_Thesis_Ayoub_Taktour.pdf

3. **Master's thesis:** *Virtual and Face-to-face Course Timetabling using multiobjective Genetic Algorithms based on Dynamic Gene Spaces* by Martín Vélez Falconí. Advisor(s): Diego Hernán Peluffo-Ordóñez. Universidad Internacional de Valencia – Spain, 2022. Available from:
https://www.diegopeluffo.com/Theses/2022_MastersThesis_MartinVelez.pdf

4. **Master's thesis:** *Kernel-based learning for classification and dimensionality reduction* by Yahya Aalaila. Advisor(s): Diego Hernán Peluffo-Ordóñez, Abdallah Mkhadri. Université Cadi Ayyad – Morocco, 2021. Available from:
https://diegopeluffo.com/Theses/2021_Masters_Thesis_Yahya_Aalaila.pdf

5. **Master's thesis:** *Estudio comparativo de modelos de predicción estocásticos y heurísticos aplicados a la estimación de la calidad del aire* by Nadia Sánchez. Advisor(s): Albert Solé, Diego Hernán

Peluffo-Ordóñez. Universitat Oberta de Catalunya – Spain, 2020. Available from:
https://openaccess.uoc.edu/webapps/o2/handle/10609/123386

6. **Master's thesis:** *Estudio comparativo de técnicas de visión artificial y procesamiento de imágenes enfocadas a la detección de cambios en coberturas boscosas* by Mónica Yolanda Moreno-Revelo. Advisor(s): Juan Bernardo Gomez-Mendoza, Diego Hernán Peluffo-Ordóñez. Universidad Nacional de Colombia – Manizales, 2020. Available from:
https://repositorio.unal.edu.co/handle/unal/77681

7. **Master's thesis:** *Sistema computacional de apoyo para la identificación de alteraciones de la marcha en rodilla basado en el uso de sensores ópticos y técnicas de procesamiento de señales* by Dagoberto Mayorca-Torres. Advisor(s): Julio C. Caicedo-Eraso, Diego Hernán Peluffo-Ordóñez. Universidad de Caldas, Colombia, 2019. Available from:
https://sites.google.com/view/dagoberto-mayorca/masters-thesis

8. **Master's thesis (Ongoing):** *Comparativo de funciones Kernel mediante métricas de predicción para oferta de fuentes alternativas de energía.* by Héctor Andrés Mora-Paz Advisor(s): Laura Mancera-Valets, Diego H. Peluffo-Ordóñez. Universidad Internacional de la Rioja, Spain.
Available from: https://reunir.unir.net/handle/123456789/10020

9. **Master's thesis:** *Estudio comparativo de técnicas de minería de datos para develar patrones de desempeño académico en enseñanza media* by Diana Chamorro Sangoquiza. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de las Fuerzas Armadas, Ecuador, 2019.
Available from: http://repositorio.espe.edu.ec/jspui/handle/21000/21822

10. **Master's thesis:** *Sistema de soporte diagnóstico de arritmias cardiacas usando conceptos de matemáticas discretas y sistemas embebidos* by Andrés Vargas Muñoz. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de las Fuerzas Armadas, Ecuador, 2019.
Available from: http://repositorio.espe.edu.ec/jspui/handle/21000/21202

11. **Master's thesis:** *Análisis exploratorio del comportamiento de datos cambiantes en el tiempo usando tópicos avanzados de álgebra lineal* by Omar Ricardo Oña Rocha. Advisor(s): Diego Hernán Peluffo-Ordóñez. Universidad de Las Fuerza Armadas – ESPE- Quito, Ecuador, 2019.
Available from: http://repositorio.espe.edu.ec/jspui/handle/21000/21425

12. **Master's thesis:** *Metodología de reduccóin de dimensión de tipo espectral con representación interactiva de datos* by José Alejandro Salazar-Castro. Advisor(s): Diego Hernán Peluffo-Ordóñez. Universidad de Nariño, Pasto, Colombia, 2018.
Available from: http://bdigital.unal.edu.co/64456/

13. **Master's thesis:** *Metodología basada en el enfoque modular para el diseño y simulación de instalaciones industriales y sistemas de producción en un contexto de "Industry 4.0"* by Luis Omar Alpala Alpala. Advisor(s): María del Mar Alemany Díaz, Diego Herán Peluffo-Ordóñez. Universidad Politecnica de Valencia, Spain, 2016.
Available from: https://riunet.upv.es/handle/10251/71537

14. **Master's thesis:** *Metodología de visualización de datos utilizando métodos espectrales y basados en divergencias para la reducción interactiva de la dimensión* by Andrés Javier Anaya. Advisor(s): Diego Herán Peluffo-Ordóñez. Universidad Tecnológica de Pereira, Colombia, 2017. Available from:
https://repositorio.utp.edu.co/dspace/handle/11059/9180

15. **Master's thesis:** *I*nteractive Data Visualization Using Dimensionality Reduction and Similarity - Based Representations by Paul David Rosero-Montalvo. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de las Fuerzas Armadas ESPE, Ecuador, 2017. Available from:
https://sites.google.com/a/sdas-group.com/master-s-thesis-by-paul-rosero/

Degree theses

1. **Undergraduate thesis:** *Preprocessing and Anomaly detection in solar photovoltaic arrays* by Salma TADLAOUI. Advisor(s): Ibtihal Ait Abdelmoula, Diego H. Peluffo-Ordóñez. Mohamed VI Polytechnic University – Morocco, 2021. Available from:
https://www.diegopeluffo.com/Theses/2022_UndergraduateProject_SalmaTADLAOUI.pdf

2. **Undergraduate thesis:** *An exploratory analysis of electric vehicle charging data* by Hassan OUBRAHIM. Advisor(s): Abdelilah Rochd, Diego H. Peluffo-Ordóñez. Mohamed VI Polytechnic University – Morocco, 2021. Available from:
https://www.diegopeluffo.com/Theses/2022_UndergraduateProject_HassanOUBRAHIM.pdf

3. **Undergraduate thesis:** *Comparison of machine learning methods for prediction of photovoltaic systems* by Manal QADA. Advisor(s): AIT ABDELMOULA Ibtihal, Diego H. Peluffo-Ordóñez. Mohamed VI Polytechnic University – Morocco, 2021. Available from:
https://www.diegopeluffo.com/Theses/2022_UndergraduateProject_ManalQADA.pdf

4. **Undergraduate thesis:** *A comprehensive overview of kernel principal component analysis from a distance-based viewpoint* by Ismail BACHCHAR. Advisor(s): Diego H. Peluffo-Ordóñez. Mohamed VI Polytechnic University – Morocco, 2021. Available from:
https://diegopeluffo.com/Theses/2021_Degree_Thesis_IsmailBACHCHAR.pdf

5. **Undergraduate thesis:** *Energy Optimization in Steel making plant* by Alain Thierry ILIHO MANZI. Advisor(s): Almokhtar AIT EL MRABTI, Diego H. Peluffo-Ordóñez. Mohamed VI Polytechnic University – Morocco, 2021. Available from:
https://diegopeluffo.com/Theses/2021_Degree_Thesis_Thierry_ILIHO.pdf

6. **Undergraduate thesis:** *A comparative study of arrhythmia classification from electrocardiographic signals* by Christ Ravel NZAMBI NGOUALA. Advisor(s): Diego H. Peluffo-Ordóñez. Mohamed VI Polytechnic University – Morocco, 2021. Available from:
https://diegopeluffo.com/Theses/2021_Degree_Thesis_Ravel_NZAMBI.pdf

7. **Undergraduate thesis:** *An interactive tool for data analysis visualization techniques* by Martín Vélez-Falconí. Advisor(s): Diego H. Peluffo-Ordóñez. Univesidad Yachay Tech. Ecuador, 2020. Available from:
https://repositorio.yachaytech.edu.ec/handle/123456789/264

8. **Undergraduate thesis:** *Theory and Implementation of the Savvy Ball Method with application to machine learning* by Peter Sly Manosalvas-Holguín. Advisor(s): Diego H. Peluffo-Ordóñez. Univesidad Yachay Tech. Ecuador, 2020. Available from:
https://repositorio.yachaytech.edu.ec/handle/123456789/209

9. **Undergraduate thesis:** *A Recommendation System Implementation For E-commerce Web Sites With Implicit Feedback Data Sets: An Ecuadorian Enterprise Case Study* by Osiris Anael Román-Eras. Advisor(s): Diego H. Peluffo-Ordóñez. Univesidad Yachay Tech. Ecuador, 2020. Available from:
https://repositorio.yachaytech.edu.ec/handle/123456789/193

10. **Undergraduate thesis:** *An exploratory study on the characterization and classification of electroen-cephalographic signals for the design of computer-aided epilepsy diagnosis system* by Emil Darío Vega-Gualán. Advisor(s): Diego H. Peluffo-Ordóñez. Univesidad Yachay Tech. Ecuador, 2019. Available from:
https://repositorio.yachaytech.edu.ec/handle/123456789/69

11. **Undergraduate thesis:** *Estudio comparativo de técnicas de machine learning basado en visión artificial para control y monitoreo vehicular* by Jesús Leonardo Hormaza-Chamorro and Oscar David Noguera-Sánchez. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2019. Available from:
https://www.diegopeluffo.com/Theses/2019_DegreeThesis_Comparative_Study.pdf

12. **Undergraduate thesis:** *Caracterización y clasificación de señales EEG para aplicaciones de interfaz cerebro computador* by Wilmer Castro. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2019. Available from:
https://www.diegopeluffo.com/Theses/2019_DegreeThesis_Wilmer_Castro.pdf

13. **Undergraduate thesis:** *Arquitectura e interfaz de simulación para digitalización de objetos a partir de imágenes y técnicas de medición de profundidad* by Cristhian David Ruales-Mora and Johana Elizabeth Vela-Rojas. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2019. Available from:
https://www.diegopeluffo.com/Theses/2019_DegreeThesis_Digitalization.pdf

14. **Undergraduate thesis:** *Caracterización de señales volcánicas para la clasificación supervisada de eventos sísmicos* by Edison Gerardo Rosero-Narváez and Angela Patricia Cabrera-Riobamba. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2019. Available from:
https://www.diegopeluffo.com/Theses/2019_DegreeThesis_Volcano_classification.pdf

15. **Undergraduate thesis:** *Estudio comparativo de algoritmos para la segmentación de señales volcánicas orientado a la clasificación de sismos* by Yoiner Jesús Erazo-Bravo. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2019. Available from:
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18. **Undergraduate thesis:** *Desarrollo de una herramienta interactiva de análisis de datos integrando técnicas de visualización y modelos de interacción* by Cielo K. Basante-Villota and Carlos M. Ortega-Castillo. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2018. Available from
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19. **Undergraduate thesis:** *Estudio Comparativo de Técnicas de Optimización Multiobjetivo para determinar la más adecuada en Problemas Multi-Criterio* by David Francisco Dorado Sevilla. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2018. Available from:
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20. **Undergraduate thesis:** *Sistemas de razonamiento basado en casos para aplicaciones médicas con etapas de adaptación y recuperación mejoradas* by David Ramiro Bastidas Torres and Camilo Andrés Piñeros Rodriguez. Advisor(s): Diego H. Peluffo-Ordóñez.Universidad de Nariño. Colombia, 2018. Available from:
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21. **Undergraduate thesis:** *Diseño de una estrategia de reconocimiento de patrones en un escenario de múltiples expertos* by Iván Darío Gustin Sacanambuy and Mauricio Bolaños Ledezma. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2017. Available from:
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22. **Undergraduate thesis:** *Estudio comparativo de Técnicas de machine learning para la determinación de embarazos pre-término a partir del electrohisterograma* by Angela Stephanya Caipe Gordillo and Jorge Armando Muñoz Rosero. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2017. Available from:
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23. **Undergraduate thesis:** *Sistema de razonamiento basado en casos como soporte al diagnóstico médico mediante clasificación de datos multi-clase* by Mabel Ximena Ortega Adarme and Diana Marcela Viveros Melo. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2017.
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https://www.diegopeluffo.com/Theses/2017_DegreeThesis_muticlass_CBR.pdf

24. **Undergraduate thesis:** *Diseño de un sistema de asistencia computarizada para la detección de arritmias en registros electrocardiográficos* by Mónica Yolanda Moreno Revelo and Sandra Carolina Patascoy Botina. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2017.
Available from:
https://www.diegopeluffo.com/Theses/2017_DegreeThesis_ECG.pdf

25. **Undergraduate thesis:** *Metodología de visualización interactiva de datos de alta dimensión a partir de un modelo intuitivo de reducción de dimensión* by Diego Fernando Peña Unigarro Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2016.
Available from:
https://www.diegopeluffo.com/Theses/2016_DegreeThesis_DiegoPena.pdf

26. **Undergraduate thesis:** *Implemetación de una Interfaz de visualización de Datos Eficiente e Interactiva a Partir de una Perspectiva Geométrica* by Jose Alejandro Salazar Castro and Yesid Camilo Rosas Narvaez. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2015.
Available from:
https://www.diegopeluffo.com/Theses/2015DegreeThesis_Interactive_interface_for_datavis.pdf

27. **Undergraduate thesis:** *Estudio comparativo de modelos computacionales para la asistencia pre-quirurgica de pacientes con epilepsia* by Melissa Elizabeth Acosta Muñoz and Hugo Alberto Paredes Argoty. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2015.

CV outline*: Personal data* ● *Education* ● *Professional experience* ● *Teaching experience* ●
Distinctions & awards ● *Projects* ● *Publications* ● *Professional references*

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https://www.diegopeluffo.com/Theses/2015DegreeThesis_Epileptic_source_localization.pdf

Guest editor/Invited talks/Organizing and Program committees

[1]. General Chair (2025): 8th International Conference on Applied Informatics, Benguerir, Morocco, October 8-10, 2025. Link: https://icai.itiud.org/index.php?pid=committees

[2]. Scientific Committee/Editorial Committee Member (2024 - 2025): The 2025 IFE Conference, Monterrey, Mexico, January 28-30, 2025. Link: https://ifeconference.tec.mx/en-US/comite

[3]. Workshop organizer and speaker: The 2024 IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI), sponsored by the IEEE Engineering in Medicine and Biology Society (IEEE EMBS) (BHI 2024), Texas, from November 10-13, 2024. Workshop: AI in Tele-echography: Opportunities and Challenges for Clinical Applications. Link: https://bhi.embs.org/2024/workshops/

[4]. Guest Editor (2023 - 2024): Mathematics journal. Special issue: Artificial Intelligence and Meta-heuristics: Connections and Applications. This special issue belongs to the section "D2: Operations Research and Fuzzy Decision Making". Link:

https://www.mdpi.com/journal/mathematics/special_issues/537TYSB390

[5]. Editor (2020 - 2022): Technology-Enabled Innovations in Education Select Proceedings of CIIE 2020. Link: https://link.springer.com/book/9789811933820

[6]. Open invited track organizer: 11th IFAC Symposium on Biological and Medical Systems (BMS2021). Link: https://bms2021.ugent.be/OIT.html

[7]. Guest editor (2020 - 2021): Special Issue: The Impact of Technological Advancements on Educational Innovation (VSI-tei). Journal: Computers and Electrical Engineering. Link:
https://www.sciencedirect.com/journal/computers-and-electrical-engineering/special-issue/10D88TM9Z6H

[8]. Plenary talk: Kernel-based approaches for time-varying data analysis within unsupervised settings. Latin American Workshop on Computational Neuroscience. São João del-Rei, MG - Brazil - September, 18-20, 2019. Link: https://lawcn.co/2019/keynote.html

[9]. Plenary talk: Interactive data visualization of high-dimensional data: A dimensionality reduction viewpoint. ICAETT 2019 - Intenational Conference on Advances in Emerging Trends and Technologies. Link:
http://icaett-conferences.org/icaett2019/interactive-data-visualization-of-high-dimensional-data-a-dimensionality-reduction-viewpoint/

[10]. Organizing committee member: IEEE Latin American Conference on Computational Intelligence – LA-CCI.
2019 (https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9036759)
2016 (https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=7885692)

[11]. General chair: TICEC 2017.
Link: https://ticec2017.cedia.edu.ec/comite-organizador/

Publications

[1] J. Guapaz, J. P. Jervis, D. Haro, J. Padilla, R. Guachi, D. H. Peluffo-Ordóñez, and L. Guachi-Guachi, "Automatic identification of forest areas in the "carolina" park using resnet50, efficientnetb0 and vgg16: A case study," in *Applied Informatics*, H. Florez and H. Astudillo, Eds. Cham: Springer Nature Switzerland, 2025, pp. 31–42. [Online]. Available: https://link.springer.com/chapter/10.1007/978-3-031-75144-8_3

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