
Diego Hernán Peluffo-Ordóñez

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Personal data

Name: Diego Hernán Peluffo-Ordóñez
Date of Birth: October 25, 1986. (Pasto, Colombia)
Nationality: Colombian
Position: Head of the SDAS Research Group
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Profile summary

I was born in Pasto - Colombia in 1986. I received my degree in electronic engineering, M.Eng. and PhD 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 an assistant teacher 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](#).

Currently, I am working as an assistant professor at the [Modeling, Simulation and Data Analysis \(MSDA\)](#) Research Program from [Mohammed VI Polytechnic University](#) – Morocco. Also, I work as a Consultant/Curriculum Author at [deeplearning.ai](#). I am the founder and the head of the [SDAS Research Group](#). I am an external collaborator at [Writing Lab](#) from Tecnológico de Monterrey – Mexico. As well, I am an external supervisor of PhD programs at [Universidad de Granada](#) - Spain, [Universitat Politècnica de València](#) - Spain, and [Universidad Nacional de La Plata](#) - Argentina. I have served as an organizing committee member (general chair, session chair, competitions chair) as well as a keynote speaker in several [conferences](#). Also, I have served as a guest editor for the [Computers and Electrical Engineering Journal](#).

My main research interests are kernel-based and spectral methods for data clustering and dimensionality reduction. The scope of the topics that I am currently interested in encompasses complex high-dimensional data, signal, image and video analysis for medical and industry applications.

Education

- 2014:** Post-doctorate.
 Machine Learning Group. Université Catholique de Louvain. Louvain la-Neuve, Belgium.
 Grant given by *Belgian National Scientific Research Fund* with DRedVis project 7.0175.13.
- 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>
- 2012:** Research internship.
 ESAT KU Leuven - Belgium. *Visitor student*.
 Research topic: *Kernel spectral clustering and data projection*. Duration: 3 months.
- 2009:** M.Eng. 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 Engineer.
 Department of Electrical, Electronic and Computer Engineering.
 Universidad Nacional de Colombia – Manizales.

Programming skills

- C/C++ • Python • MatLab, Octave, SciLab • PhP • Java

Professional Experience

- 2020 - Today** DeepLearning.ai - Palo Alto, California, USA.
 Curriculum author/Consultant.
 Director of Product: Ryan Keenan.
 E-mail: ryan@deeplearning.ai.
- 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.

Teaching Experience

- 2020 - Today** Mohammed VI Polytechnic University – Morocco.
 Assistant professor.
 Modeling, Simulation and Data Analysis (MSDA) Research Program.
 Subject: Machine learning.
 E-mail: msda.info@um6p.ma – Phone: +212 5 22929419.

- 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 - Today** Corporación Universitaria Autónoma de Nariño, sede Pasto – Colombia.
Researcher/Professor.
Faculty of Engineering. Informatics engineering program.
Subjects: Mathematical theorems, functions and methods for differential and integral calculus, research methods and techniques.
E-mail: talento.humano@aunar.edu.co – Phone: +57 2 7225219.
- 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.
- 2008 - 2012:** Universidad Nacional de Colombia, sede Manizales – Colombia.
Lecturer.
Department of Electrical, Electronic and Computer Engineering.
Subjects: Digital Electronic, Signals and Systems, Matrix Algebra and Signals Theory.
E-mail: depelecco_man@unal.edu.co – Phone: +57 6 8879300. Ext. 55820.

Courses

- [1]. *Módulo de Investigación:*. Duration: 40 hours. Universidad Técnica del Norte. Ibarra, Ecuador. 20-24 February, 2017. Attendant.
- [2]. *Metodología del aprendizaje y guía pedagógica para la elaboración del rediseño curricular de carreras aplicadas a la ingeniería:* 40 hours. Universidad Técnica del Norte. Ibarra, Ecuador. 17-30 July, 2016. Attendant.
- [3]. *Rediseño y aprobación ante el CES de la Carrera de Ingeniería en Telecomunicaciones:* 200 hours. Universidad Técnica del Norte. Ibarra, Ecuador. 20 June - 5 August, 2016. Attendant.
- [4]. *III Jornadas Académicas CIERCOM 2016:* 40 hours. Universidad Técnica del Norte. Ibarra, Ecuador. 15-17 June, 2016. Attendant.

- [5]. *Herramientas para elaboración de Artículos Científicos*. Duration: 40 hours. In: III Jornadas Académicas CIERCOM 2016. Universidad Técnica del Norte. Ibarra, Ecuador. July, 2016. Instructor.
- [6]. *Notación matricial e introducción al reconocimiento de patrones*. Duration: 10 hours. Universidad Surcolombia. Pasto, Colombia. 1-31 March, 2016. Instructor.
- [7]. *Introducción al Método Científico*. Duration: 40 hours. Universidad Técnica del Norte. Ibarra, Ecuador. 1-31 March, 2016. Attendant.

Research Experience

- 2019**: *Multipurpose Methodology For The Design Of Human-Machine Interfaces Using Electroencephalographic Signals*. Project director. Universidad Técnica del Norte, and Yachay Tech University. Link: <https://sdas-group.com/projects/>.
- 2016**: *Methodology of information visual analysis in Big Data*. Project director. Universidad Técnica del Norte. Resolution: 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 (Analysis of alternative energy sources at 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.
- 2014-2015**: *Project: Investigación en Semana Nacional de Ciencia, Tecnología e Innovación (National Research Week)*. Researcher. Nariño-Colombia.
- 2013-2014**: *Project: Dimensionality reduction and data visualization*. Post-doctoral researcher. UCL-Université Catholique de Louvain. Louvain la-Neuve, Belgium.
- 2012**: *DRedVis*. UCL-Université Catholique de Louvain. Louvain la-Neuve, Belgium.
- 2008 - 2012**: *Research area: Spectral clustering based on kernels*. Signal Processing and Recognition Research Group from Universidad Nacional de Colombia – Manizales.
- 2007 - 2009**: *Research area: Characterization and unsupervised analysis of heartbeats in ECG signals*. Signal Processing and Recognition Research Group from Universidad Nacional de Colombia – Manizales.

Distinctions, awards and scholarships

- 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.
- 2016**: Recognition for the paper: On the relationship between dimensionality reduction and spectral clustering from kernel viewpoint on the 13th International Conference of Distributed Computing and Artificial Intellingence. DCAI'16. Held in Sevilla-Spain.

- 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, sede Manizales.
- 2009 - 2010** Scholarship for master’s studies. “Estudiantes sobresalientes de postgrado” scholarship program. Universidad Nacional de Colombia – Manizales.
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 program for university study at Universidad Nacional de Colombia. Given by Instituto Técnico Industrial Municipal. Pasto, Colombia.

Memberships

- Head of the Smart Data Analysis Systems Group (SDAS Research Group www.sdas-group.com).
- Supervisor and external member of the ALEPHSYS (Algorithms embedded in Physical Systems) research group from Universitat Rovira i Virgili - Spain (http://www.doctor.urv.cat/futurs-estudiants/oferta/7709/en_arees-de-recerca/).
- *IEEE professional member*. 2014-2021.
- *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: <http://diegopeluffo.com/index.php?tabFile=advisory.html>.

Doctoral theses

- [1]. **Doctoral thesis:** *Sistema genérico de razonamiento basado en casos multi-clase como soporte al diagnóstico médico mediante técnicas de reconocimiento de patrones* 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>

- [2]. **Doctoral thesis (Ongoing):** *Diseño de sistemas inteligentes de realidad virtual para la monitorización de entornos en Smart Factory* by Luis Omar Alpala. Advisor(s): Juan Carlos Torres, Diego Hernán Peluffo-Ordóñez, Universidad de Granada, Spain.
- [3]. **Doctoral thesis (Ongoing):** *Reconstrucción 3D de escenarios en tiempo real a partir de cámaras de tipo monocular empleando técnicas de inteligencia artificial* by Erick Patricio Herrera-Granda. Advisor(s): Juan Carlos Torres, Diego Hernán Peluffo-Ordóñez, Universidad de Granada, Spain.
- [4]. **Doctoral thesis (Ongoing):** *Planificación de Operaciones Dinámica e Inteligente en Empresas Textiles Ecuatorianas: Contexto determinista e incierto* by Leandro Leonardo Lorente-Leyva. Advisor(s): María del Mar Alemany Díaz, Diego Hernán Peluffo-Ordóñez. Universitat Politècnica de València, Spain.
- [5]. **Doctoral thesis (Ongoing):** *Métodos y modelos multi-objetivo para optimizar la gestión de cadenas de suministro de pequeñas y medianas empresas agroalimentarias ecuatorianas* by Israel David Herrera-Granda. Advisor(s): María del Mar Alemany Díaz, Diego Hernán Peluffo-Ordóñez. Universitat Politècnica de València, Spain.
- [6]. **Doctoral thesis (Ongoing):** *I-SDR: Método generalizado de reducción de atributos mediante la visualización interactiva de los datos (Interactive Spectral Dimensionality Reduction)* by Cosme MacArthur Ortega-Bustamante. Advisor(s): Waldo Hasperué, Diego Hernán Peluffo-Ordóñez. Universidad Nacional de La Plata, Argentina.
- [7]. **Doctoral thesis (Ongoing):** *Modelo de fusión de datos orientado a la calidad de la información* by Miguel Alberto Becerra-Botero. Advisor(s): Advisor(s): Catalina Tobón, Diego Hernán Peluffo-Ordóñez. Universidad de Medellín, Colombia.

Master's theses

- [1]. **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, 2020. Available from: <https://http://openaccess.uoc.edu/webapps/o2/handle/10609/123386>
- [2]. **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>
- [3]. **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>
- [4]. **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>
- [5]. **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>

- [6]. **Master's thesis:** *Sistema de soporte diagnóstico de arritmias cardíacas 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>
- [7]. **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>
- [8]. **Master's thesis:** *Metodología de reducción 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/>
- [9]. **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>
- [10]. **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: <http://repositorio.utp.edu.co/dspace/handle/11059/9180>
- [11]. **Master's thesis:** *Interactive 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]. **Degree 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>
- [2]. **Degree 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>
- [3]. **Degree 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>
- [4]. **Degree thesis:** *An exploratory study on the characterization and classification of electroencephalographic 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>

- [5]. **Degree 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/DegreeTheses/2019_DegreeThesis_Comparative_Study.pdf
- [6]. **Degree 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/DegreeTheses/2019_DegreeThesis_Wilmer_Castro.pdf
- [7]. **Degree 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/DegreeTheses/2019_DegreeThesis_Digitalization.pdf
- [8]. **Degree 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/DegreeTheses/2019_DegreeThesis_Volcano_classification.pdf
- [9]. **Degree 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:
https://www.diegopeluffo.com/DegreeTheses/2019_DegreeThesis_volcano_segmentation.pdf
- [10]. **Degree thesis:** *Estudio comparativo de técnicas de Machine Learning para el control de movimiento de una prótesis de extremidad superior* by Laura Daniela Lasso-Arciniegas and Brayan Andrés Viveros-Melo. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2019. Available from:
https://www.diegopeluffo.com/DegreeTheses/2019_DegreeThesis_EMG.pdf
- [11]. **Degree thesis:** *Estudio comparativo de técnicas de caracterización y clasificación automática de emociones a partir de señales del cerebro* by Jeferson Gomez-Lara and Andrés Ordóñez-Bolaños. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2018. Available from:
https://www.diegopeluffo.com/DegreeTheses/2018_DegreeThesis_Emotions_EEG.pdf
- [12]. **Degree 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
https://www.diegopeluffo.com/DegreeTheses/2018_DegreeThesis_Visualization.pdf
- [13]. **Degree 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:
https://www.diegopeluffo.com/DegreeTheses/2018_DegreeThesis_David_Dorado_Optimization.pdf
- [14]. **Degree 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 Rodríguez. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2018. Available from:
https://www.diegopeluffo.com/DegreeTheses/2018_DegreeThesis_ImprovedCBR.pdf

- [15]. **Degree 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: https://www.diegopeluffo.com/DegreeTheses/2016_DegreeThesis_Strategy_design_of_pattern_recognition.pdf
- [16]. **Degree 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: https://www.diegopeluffo.com/DegreeTheses/2017_DegreeThesis_EHG.pdf
- [17]. **Degree 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. Available from: https://www.diegopeluffo.com/DegreeTheses/2017_DegreeThesis_muticlass_CBR.pdf
- [18]. **Degree thesis:** *Diseño de un sistema de asistencia computarizada para la detección de arritmias en registros electrocardiográficos* by Mónica Yolanda Moreno Revelo and Sandra Carolina Patascóy Botina. Advisor(s): Diego H. Peluffo-Ordóñez. Universidad de Nariño. Colombia, 2017. Available from: https://www.diegopeluffo.com/DegreeTheses/2017_DegreeThesis_ECG.pdf
- [19]. **Degree 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/DegreeTheses/2016_DegreeThesis_DiegoPeña.pdf
- [20]. **Degree thesis:** *Implementación 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/DegreeTheses/2015DegreeThesis_Interactive_interface_for_datavis.pdf
- [21]. **Degree thesis:** *Estudio comparativo de modelos computacionales para la asistencia pre-quirúrgica 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. Available from: https://www.diegopeluffo.com/DegreeTheses/2015DegreeThesis_Epileptic_source_localization.pdf

Guest editor/Invited talks/Organizing and Program committees

- [1]. Guest editor: Special Issue: The Impact of Technological Advancements on Educational Innovation (VSI-tei). Journal: Computers and Electrical Engineering. Link: <https://www.journals.elsevier.com/computers-and-electrical-engineering/call-for-papers/technological-advancements-on-educational-innovation>
- [2]. 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://www.lawcn.com.br/keynote.html>
- [3]. Plenary talk: Interactive data visualization of high-dimensional data: A dimensionality reduction viewpoint. ICAETT 2019 - International 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/>

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- [4]. Plenary talk: Aplicaciones y perspectivas del procesado digital de señales. VIII Simposio Internacional Apropiación, Generación y Uso Edificador del Conocimiento. Quito - Ecuador - November, 20-22, 2019. Link: <https://uisrael.edu.ec/siaguec-2019/ponentes/>
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