

## **RESUMEN**

### **I. DATOS GENERALES**

Nombre: Youness El Hamzaoui

### **II. GRADO ACADÉMICO**

Doctor en Ingeniería y Ciencias Aplicadas  
Centro de Investigación en Ingeniería y Ciencias Aplicadas  
Universidad Autónoma de Morelos

### **III. EXPERIENCIA LABORAL**

Entre 2012-2014 ha impartido cursos de licenciatura en la Universidad Autónoma de Cd Juárez.

Entre 2015-2017 ha impartido cursos de Licenciatura y maestría en el Instituto Tecnológico de Tijuana.

Desde Mayo 2017 se encuentra laborando en la Universidad Autónoma del Carmen (UNACAR), en la Facultad de Ingeniería, como profesor de tiempo completo, bajo las siguientes funciones: Docencia, Tutoría, Investigación y Gestión de acuerdo a los planes y programas de académicos. Es miembro de academia de mecatrónica y el núcleo académico básico de la maestría en mechatrónica.

### **IV. LINEAS DE INVESTIGACIÓN**

Modelación, simulación, optimización, estadística inferencial y reconocimiento de patrones mediante las herramientas de machine learning.

### **V. PRODUCCIÓN ACADÉMICA**

Ha publicado más de 21 artículos en revistas indexadas y arbitradas. Ha obtenido fondos para becas, equipo de laboratorio y estancias de investigación, a través de convocatorias PRODEP, y TecNM. Es miembro de evaluadores CONACYT desde 2016, Es miembro del Sistema Nacional de Investigadores desde 2013, y cuenta con el perfil deseable PRODEP desde 2014.

## **VI. ÚLTIMAS PUBLICACIONES**

### ***IV.1) Tesis de Maestría:***

Control de turbinas de gas mediante redes neuronales artificiales. Concluida. Por Nicolas Salvador García. UNACAR, Enero 2018. Abraham González Román. Postgraduate Student (Center of Investigation in Engineering and Applied Science. Cuernavaca. Autonomous University of Morelos State) 2010-2012. Status: Finish

### ***IV.2) Tesis de Licenciatura***

-Erick Martin Hernandez Rios. Undergraduate student. Mechatronic Department Engineering. Universidad Autonoma del Carmen during 11 Octubre 2018 to April 2019.

Status: Concluded.

-Marco Antonio Agustin Ramirez. Undergraduate student. Mechatronic Department Engineering. Universidad Autonoma del Carmen during 12 November to April 2019.

Status: Concluded.

### ***IV.3) Research paper***

- a) Corrosion rate prediction for metals in biodiesel using artificial neural networks. Renewable Energy. Volume 140, September 2019, Pages 592-601.
- b) Comparison of Particle Swarm Optimization and Genetic Algorithm for Multiproduct Batch Plant Design of Protein Production. Journal of Analytical & Pharmaceutical Research. J Anal Pharm Res. 2018;7(5):553-563. Volume 7 Issue 5 – 2018.
- c) Multivariate optimization of Pb(II) removal for clinoptilolite-rich tuffs using genetic programming: A computational approach. Chemometrics and Intelligent Laboratory Systems. Volume 177, pages 151-162, 15 June 2018.
- d) Modeling the Adsorption of Phenols and Nitrophenols by Activated Carbon using Genetic Programming. Accepted for publication in Journal of Cleaner ProductionJournal of Cleaner Production. 17 January 2017.
- e) Clasificacion de senales EEG de movimiento imaginario con algoritmos neuronales GHA-MLP. Num Espcial de la revista Aristas: Investigacion Basica y Aplicada. ISSN 2007-9478. Vol 6. Num 11.2017.
- f) Modeling and optimization of a solar parabolic trough concentrator system using inverse artificial neural network. Accepted, to appear in Journal of Renewable and Sustainable Energy. January 2017.<http://dx.doi.org/10.1063/1.4974778>.
- g) Artificial neural networks for modeling and optimization of phenol and nitrophenol adsorption onto natural activated carbon.

Accepted, to appear in the journal of Desalination and Water Treatment. 2016.

- h) Failure probability estimation of steam turbine blades by Enhanced Monte Carlo Method. Engineering Failure Analysis. 56 (2015) 80-88.
- i) Optimization of Operating Conditions for Steam Turbine by means of Neural Network Inverse. Applied Thermal Engineering 75 (2015) 648-657.
- j) The use of artificial neural network (ANN) for modeling the useful life of the failure assessment in blades of steam turbines. Engineering Failure Analysis. Volume 35, 15 December 2013, Pages 562–575.
- k) Estimation of useful life in turbines blades with cracks in corrosive environment. Engineering Failure Analysis 35 (2013) 576–589.
- l) Pulpo y la necesidad de un ambiente colaborativo para el estudio del cómputo paralelo en México. Cultura Científica y Tecnología. N°54 Especial N°1, 2014. ISSN:2007-0411.
- m) Inverse neural network for optimal performance in polygeneration systems. Applied. Thermal Engineering, Volume 50, Issue 2, February 2013, Pages 1399–1406.
- n) ANN and ANFIS Models for COP Prediction of a Water Purification Process Integrated to a Heat Transformer with Energy Recycling. Chemical Product and Process Modeling. Volume 7, Issue 1. <https://doi.org/10.1515/1934-2659.1616>. 2012-05-25.
- o) Search for Optimum Operating Conditions for a Water Purification Process Integrated to a Heat Transformer with Energy Recycling using Artificial Neural Network Inverse Solved by Genetic and Particle Swarm Algorithms. Chemical Product and Process Modeling. Volume 7, Issue 1, ISSN (Online) 1934-2659, DOI: 10.1515/1934-2659.1614, May 2012. (MOST DOWNLOAD PAPER).
- p) Error propagation on COP prediction by artificial neural network in a water purification system integrated to an absorption heat transform. Renewable Energy, 2011, 36(5): 1315-1322.
- q) Optimal performance of the Chemical Oxygen Demand removal during the aqueous treatment of alazine and gesaprim commercial herbicides. Desalination. 277 (2011) 325 – 337.
- r) Search for Optimal Design of Multiproduct Batch Plants under Uncertain Demand using Gaussian Process Modeling Solved by Heuristics Methods. Chemical Product and Process Modeling. Volume 5, Issue 1, ISSN (Online) 1934-2659, DOI: 10.2202/1934-2659.1426, February 2010.
- s) A Heuristic Approach for Improvement Batch Plant Design under Imprecise demand using Fuzzy Logics. Programación Matemática y Software (2010) ISSN: 2007-3283, Vol. 2, Num 1.
- t) Application of Artificial Neural Networks to Predict the Selling Price in the Real Estate Valuation Process. 10th Mexican

International Conference on Artificial Intelligence (MICAI). 175 - 181. ISBN: 978-1-4577-2173-1. 2011.

- u) Nonlinear Optical Absorption in -MIGFET transistor modulated by electrical field and contact voltage. International Conference on Multimedia Computing and Systems. 2014.