



PERSONAL INFORMATION	Birthday: 8-Jul-1984 Address: Aramén # 313 Postal (ZIP) Code: 58070 Morelia, Mexico	e-mail: rodrigo.lopez@alumni.imtlucca.it ORCID ID: 0000-0003-2772-0051 Cellular: +52 443 155 5416 Skype ID: rdglpz
INTERESTS & SKILLS	Programming Languages MATLAB, MATHEMATICA, R, Java, C/C++, PHP-HTML-MySQL, Python, LISP. Research Machine learning, data mining, dimensionality reduction, time series, nonlinear dynamical systems, global optimization, evolutionary computing. Research groups and projects Mexican Center of Energy Innovation Project. Applied Computational Intelligence Network. Languages English: 550 ITP TOEFL points. Italian: B1 Common CEFRL Level.	
ACADEMIC DEGREE	Ph.D in Computer Science and Engineering. (W. European Doctorate mention). IMT School of Advanced Studies Lucca. Lucca, Italy. <i>(Feb-2012 Jan-2016)</i> . Thesis: Time Series Forecasting Based on Classification of Dynamic Patterns. Advisors: Dr. Alberto Bemporad. Dr. Pantelis Sopasakis. Field of study: Time series analysis. MSc in Electrical Engineering (Computer Systems Group). Univesidad Michoacana de San Nicolas de Hidalgo. Morelia, Mexico. <i>(Mar-2008 Aug-2010)</i> . Thesis: Bifurcation Diagrams for Discontinuous or Non-differentiable Equations. Advisors: Dr. Juan Jose Flores Romero, Dr. Claudio Fuerte E. Field of study: Evolutionary computing, nonlinear dynamical systems, stability analysis and optimization. B.Eng. in Computer Systems. Instituto Tecnológico de Morelia. Morelia, México. <i>(2002 2007)</i> . Thesis: Implementation and performance analysis of “Linux Terminal Server Project” for educational purposes. Field of Study: Applications of distributed operative systems.	
ACADEMIC EXPERIENCE	Teaching. Instituto Tecnológico de Morelia. Morelia, Mexico. <ul style="list-style-type: none">• Structured programming and object oriented programming (Electronic and Industrial Engineering), Research Methodology (Computational Systems Engineering). <i>(Aug-2011 Jan-2012)</i>.• Database Fundamentals (Computational Systems Engineering), Structures and organization of data. (Technology Information Engineering) and Evaluation of software projects. <i>(Jan-2011 Jul-2011)</i>.• Operative systems, selected topics in programming and research fundamentals. <i>(Aug-2010 Dec-2010)</i>. Universidad de Morelia. Morelia, Mexico. <ul style="list-style-type: none">• Web programming with PHP. <i>(Aug-2009 Dec-2009)</i>.	

- PROFESSIONAL EXPERIENCE **State Center for Information and Communications Technologies (CETIC).** (*Mar-2007 Jun-2007*). Morelia, Mexico.
Resident in physical infrastructure department.
Project: Performance analysis of **Linux Terminal Server Project** applied to basic education.
- Instituto Tecnológico de Morelia.** Morelia, Mexico. (*Feb-2007*)
Social Service Project: Develop of a PHP Web catalog for Social Service.
- IMPULSA**
Participation in the young entrepreneurs program: IMPULSA.
- PUBLICATIONS **Journal Articles in JCR**
Accepted
- *Hector Rodriguez Rangel, Vicenç Puig, Rodrigo López Farías, Juan J. Flores* . Short-Term Demand Forecast using Bank of Neural Network Models Trained using Genetic Algorithms for the Optimal Management of Drinking Water Networks. *Journal Hydroinformatics*. DOI: 10.2166/hydro.2016.199. ISSN: 1464-7141 (2016)
- Refereed Conference Papers**
Accepted
- *Juan J. Flores, Felix Calderon Solorio, Jose Rafael Cedeño Gonzalez, Jose Ortiz Bejar and Rodrigo Lopez Farias*. Comparison of Time Series Forecasting Techniques with respect to Tolerance to Noise *IEEE Autumn Meeting on Power, Electronics and Computing, Ixtapa México, November 2016*
 - *Hector Rodriguez-Rangel, Vicenç Puig, Juan J. Flores and , Rodrigo López Farías*. Flow meter Data Validation and Reconstruction using Neural Networks: Application to the Barcelona Water Network **3rd International Conference on Control and Fault-Tolerant Systems, Barcelona, Spain. 2016.**
 - *Hector Rodriguez Rangel, Vicenç Puig, Juan J. Flores and , Rodrigo López Farías*. Flow meter Data Validation and Reconstruction using Neural Networks: Application to the Barcelona Water Network **2016 European Control Conference, Aalborg, Denmark. June 2016.**
 - *Rodrigo López Farías, Juan J. Flores and Vicenç Puig*. Qualitative and Quantitative Multi-Model Forecasting with Nonlinear Noise Filter Applied to Water Demand *IEEE Autumn Meeting on Power, Electronics and Computing*. DOI: 10.1109/ROPEC.2015.7395122. **Ixtapa México, November 2015.**
 - *Juan J. Flores, Jose Ortiz Bejar, Jose Rafael Cedeno, Carlos Lara-Alvarez and Rodrigo López Farías* FNN a Fuzzy Version of the Nearest Neighbour Time Series Forecasting Technique *IEEE Autumn Meeting on Power, Electronics and Computing Ixtapa México, November 2015* .
 - *Rodrigo López Farías, Vicenç Puig* A Multiple-Model Predictor Approach Based on an On-Line Mode Recognition with Application to Water Demand Forecasting *International work-conference on Time Series 1 Granada Spain, July 2015.*
 - *Rodrigo. López, Vicenç Puig, Hector Rodriguez* An implementation of a multi-model predictor based on the qualitative and quantitative decomposition of the time-series *International work-conference on Time Series 1 Granada Spain, July 2015.*
 - *Dr, Juan Flores, Rodrigo López, Julio Barrera*. Optimization with gravitational Interactions *ROPEC XIII: Autumn Meeting of Electric power systems, electronic and computation (Reunión de Otoño de Potencia, Electrónica y Computación) Morelia México, November 2011.*
 - *Juan Flores, Rodrigo Lopez, Julio Barrera*. Gravitational Interactions Optimization. In *Learning and Intelligent OptimizatioN (LION 5) Rome, Italy - January 2011.*
 - *Juan J. Flores, Rodrigo Lopez and Julio Barrera*. Particle swarm optimization with gravitational interactions for multimodal and unimodal problems. In *Proceedings of the 9th Mexican International Conference on Artificial Intelligence (MICA I 2010)*, pages 3361-370. Springer-Verlag. **Pachuca, México. November 2010.**
- CONFERENCES, SEMINARS & WORKSHOPS **Given**
- IV National Seminar of computer learning and intelligence (SNAIC). Water demand prediction with Genetic Algorithms for the optimum optimization of a Drinking Water Distribution

System. Instituto Nacional de Astrofísica, Óptica y Electrónica. Universidad Michoacana de San Nicolás de Hidalgo. (Morelia, México. September 2016).

- 10mo Congreso Estatal de Ciencia, Tecnología e Innovación, en Ciencias de la Ingeniería y Tecnología. PSO con Nichos Interactivos y Búsquedas locales con Quasi-Newton (Morelia, México. September 2015)
- Activities of X Anniversary of the Instituto Tecnológico Superior de Ciudad Hidalgo - ' Evolutionary computing applied to dynamical systems'.(Ciudad Hidalgo, México. October 2010).
- Week of Research Projects FIE of the UMSNH - 'Gravitational Interactions Optimization ' (Morelia, México. June 2010).
- Week of Research Projects FIE of the UMSNH - 'Bifurcations Diagrams using Artificial Intelligence Tools'(Morelia, México. June 2009).

Attended

- 5th HYCON2 Ph.D. School on Control of Networked and Large-Scale Systems and the EFFINET Ph.D. School on Control of Drinking Water Networks (Lucca Italy, 1-5 of July 2013)
- Java workshop in the 2nd Week of Computation and Systems. *Morelia, Mexico (2006)*.
- Analysis and Object Oriented Design using UML (Morelia Mexico, 8-12 of August 2011)