# **Daniel Furtado Leite**

Curriculum Vitae March 27, 2019

## **Contact Information**

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## Employment

2018 –	Postdoctoral Researcher Faculty of Electrical Engineering, Supervisor: Igor Škrjanc University of Ljubljana, UL, Ljubljana, Slovenia Area: Similarity, Aggregation and Incremental Learning from Uncertain Data Streams
2014	Adjunct Professor ( <i>On a one-year leave since September 1<sup>st</sup></i> , 2018) Department of Engineering Federal University of Lavras, UFLA, Lavras, Minas Gerais, Brazil
2013 - 2014	Postdoctoral Researcher Graduate Program in Electrical Engineering. Supervisor: Reinaldo Palhares Federal University of Minas Gerais, UFMG, Belo Horizonte, Minas Gerais, Brazil Area: Adaptive and Evolving Model-based Fuzzy Control
2012 - 2013	Assistant Professor Department of Electronics Engineering Federal University of Minas Gerais, UFMG, Belo Horizonte, Minas Gerais, Brazil
Education	
2008 - 2012	PhD in Electrical Engineering University of Campinas, UNICAMP, Sao Paulo, Brazil Thesis: Evolving Granular Systems. Supervisor: Fernando Gomide
2006 – 2007	MSc in Electrical Engineering Pontifical Catholic University of Minas Gerais, PUC-MG, Belo Horizonte, Brazil Thesis: Fault Diagnosis System for Electrical Machines. Supervisor: Pyramo Costa
2001 - 2005	BSc in Control and Automation Engineering Pontifical Catholic University of Minas Gerais, PUC-MG, Belo Horizonte, Brazil

## **Research Interest**

Fuzzy systems, data streams, neural networks, machine learning, feature selection, missing data. Nonlinear dynamic systems, state-space control, adaptive control, model-based fuzzy control, neuro-fuzzy control, control via brain-computer interface. Time series prediction, pattern recognition, aggregation operators, granular computing. Parkinson's disease, meteorology and several engineering topics.



## Idioms

Advanced English, basic French, and native speaker of Portuguese.

#### **Fellowships and Distinctions**

2018 - 2013 - 2014 2008 - 2012 2006 - 2007 2004 - 2005 2003 - 2004	Post-Doctoral Fellowship - University of Ljubljana Post-Doctoral Fellowship - CNPq Brazilian National Research Council Doctoral Fellowship - CAPES Brazilian Ministry of Education Master Fellowship - CEMIG Energy Company of Minas Gerais, Brazil Undergraduate Fellowship - CEMIG Undergraduate Fellowship - FAPEMIG Minas Gerais Research Foundation, Brazil	
Awards		
2018	Outstanding Student Paper (As main supervisor of the student and project) FUZZ'IEEE – IEEE International Conference on Fuzzy Systems, Rio de Janeiro, Brazil	
2018	Best Paper Presentation Award (As main supervisor of the student and project) Meeting of the Brazilian Society of Computational and Applied Mathematics, SBMAC	
2017	Early Career Award North American Fuzzy Information Processing Society, NAFIPS	
2017	IEEE CIS Outstanding PhD Dissertation Award Computational Intelligence Society, IEEE - CIS	
2015	Best PhD Thesis Award North American Fuzzy Information Processing Society, NAFIPS	
2014	Best PhD Thesis Award in Artificial and Computational Intelligence Brazilian Computer Society, SBC	
2012	2nd place - FUZZ-IEEE'12 Competition: Learning Fuzzy Systems from Data In: World Congress on Computational Intelligence, Brisbane, Australia	
International grants for meetings and events		
2017	EU77 JEEE/17 Transf Count Designed JEEE CIC Manles JT	

2017	FUZZ-IEEE'17 Travel	Grant Recipient -	IEEE CIS, Naples IT
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- 2016 EAIS'16 Grant Recipient for a Plenary Talk IEEE SMC Society, Natal BR
- 2012 WCCI'12 Travel Grant Recipient IEEE CIS, Brisbane AU
- 2009 IJCNN'09 Outstanding Student Paper, Travel Grant Recipient IEEE CIS, Atlanta US

# National grants to attend conferences FUZZ-IEEE'15, NAFIPS'14, WTCF'12, WCCI'12, FUZZ-IEEE'11, WCCI'10, IPMU'10, SBAI'09, IJCNN'09, POWERENG'07

#### **Research Experience**

2018 -	Researcher - University of Ljubljana, Slovenia
2014 -	Member of the Graduate Program in Automation and Systems Engineering
	- Federal University of Lavras, UFLA, Brazil
2013 - 2014	Postdoctoral fellow - Federal University of Minas Gerais, UFMG, Brazil
2008 - 2012	Research assistant - University of Campinas, UNICAMP, Brazil
2004 - 2007	Research assistant - Pontifical Catholic University of Minas Gerais, PUC-MG, Brazil
2003 - 2004	Research assistant - Minas Gerais Technological Center Foundation, PUC-MG, Brazil

## Teaching Experience (Total: 1749 hours)

- 2017 Control Systems Laboratory (Undergrad course, 51 hours, 3 times)
- 2017 Control of Dynamical Systems (Undergrad course, 102 hours, once)
- 2015 Linear Systems Theory UFLA (Graduate course, 60 hours, twice)
- 2015 Fuzzy Systems UFLA (Graduate course, 60 hours, 5 times)

2014 -	State-Space Control Systems – UFLA (Undergrad course, 68 hours, 7 times)
2014 -	Control and Automation Laboratory – UFLA (Undergrad course, 68 hours, 4 times)
2012 - 2013	Linear Dynamic Systems Lab – UFMG (Undergrad course, 30 hours, twice)
2012 - 2013	Industrial Informatics Lab – UFMG (Undergrad course, 30 hours, 5 times)
2012 - 2012	Control and Automation I Lab – UFMG (Undergrad course, 60 hours, once)
2012 - 2012	Control Theory – PUC-MG (Undergrad course, 64 hours, once)
2009 - 2009	Artificial Intelligence – UNICAMP (Undergrad course, Tutor, 60 hours, once)

## Administrative Experience

2015 – 2017 Member of the Board of the Graduate Program in Automation and Systems Engineering – Federal University of Lavras, UFLA, Brazil

**Selected Publications** (*Not included publications in the Portuguese language*)

[J] Journal [B] Book Chapter [C] Conference

[J16] (*Submitted*) Daniel Leite, Igor Škrjanc. "Ensemble of Optimal Granular Experts, OWA Aggregation, and Time Series Prediction." Information Sciences, 35p. 2019.

[J15] (*Submitted*) Daniel Leite, Goran Andonovski, Igor Škrjanc, Fernando Gomide. "Optimal Rule-based Granular Systems from Data Streams." IEEE Transactions on Fuzzy Systems, 14p. 2019.

[J14] (*Submitted*) Charles Aguiar, Daniel Pereira, **Daniel Leite**, Goran Andonovski, Igor Škrjanc. "Nonlinear Modeling and LMI Fuzzy Control of Overhead Crane Systems." Soft Computing, 12p. 2019.

[J13] (*Major revisions*) Cristiano Garcia, **Daniel Leite**, Igor Skrjanc. "Incremental Missing Data Imputation for Evolving Fuzzy Granular Prediction." IEEE Transactions on Fuzzy Systems, 15p. 2018.

[J12] (*Minor revisions*) Eduardo Soares, Cristiano Garcia, Ricardo Pouças, Heloísa Camargo, **Daniel Leite**. "Evolving Fuzzy Set-based and Cloud-based Unsupervised Classifiers for Spam Detection." IEEE Latin America Transactions, 8p. 2018.

[J11] (*Minor revisions*) Fabricio Lucas, Pyramo Costa, Rose Batalha, **Daniel Leite**. "Adaptive Neural Network for High Impedance Fault Detection and Location in Distribution Systems with Time-Varying Distributed Generation." ISA Transactions, 12p. 2018.

[J10] (*Accepted*) Igor Škrjanc, Jose Iglesias, Araceli Sanchis, **Daniel Leite**, Edwin Lughofer, Fernando Gomide. "Evolving Fuzzy and Neuro-Fuzzy Approaches in Clustering, Regression, Identification, and Classification: A Survey." Information Sciences, 55p. 2019.

[C20] **Daniel Leite**, Fernando Gomide, Igor Škrjanc. "Multiobjective Optimization of Fully Autonomous Evolving Fuzzy Granular Models." IEEE International Conference on Fuzzy Systems – New Orleans, 7p. 2019.

[C19] **Daniel Leite**, Charles Aguiar, Daniel Pereira, Gustavo Souza, Igor Škrjanc. "Nonlinear Fuzzy State-Space Modeling and LMI Fuzzy Control of Overhead Cranes." IEEE International Conference on Fuzzy Systems – New Orleans, 6p. 2019.

[C18] Igor Škrjanc, Sašo Blažič, Goran Andonovski, Jose Antonio Iglesias, Araceli Sanchis, **Daniel Leite**. "Incremental Clustering based on Decomposed Cauchy-like Density for Imbalanced Data Classification from Data Stream." IEEE International Conference on Fuzzy Systems – New Orleans, 8p. 2019.

[B5] **Daniel Leite**. "Comparison of Genetic and Incremental Learning Methods for Neural Network-based Electrical Machine Fault Detection." In: Predictive Maintenance in Dynamic Systems, Springer. Editors: Edwin Lughofer, Moamar Mouchaweh, 38p. December, 2018.

[ J9 ] Sergio Silva, Pyramo Costa, Marcio Santana, **Daniel Leite**. "Evolving Neurofuzzy Network Applied to Online Classification of High Impedance Faults." Neural Computing and Applications. Soft Computing Techniques: Applications and Challenges, 14p. 2018.

[C17] Eduardo Soares, Heloísa Camargo, Suzana Camargo, **Daniel Leite**. "Incremental Gaussian Granular Fuzzy Modeling Applied to Hurricane Track Forecasting." IEEE World Congress on Computational Intelligence: Int Conf on Fuzzy Systems – Rio de Janeiro, 7p. Jul. 2018.

[C16] Fabricio Lucas, Pyramo Costa, Rose Batalha, **Daniel Leite**. "High Impedance Fault Detection in Time-Varying Distributed Generation Systems using Adaptive Neural Networks." IEEE World Congress on Computational Intelligence: Int Joint Conf on Neural Networks – Rio de Janeiro, 8p. Jul. 2018.

[J8] Vania Mota, Flavio Damasceno, **Daniel Leite**. "Fuzzy Clustering and Fuzzy Validity Measures for Knowledge Discovery and Decision Making in Agricultural Engineering." Computers and Electronics in Agriculture, Vol. 150, pp. 118-124. 2018.

[J7] Eduardo Soares, Pyramo Costa, Bruno Costa, **Daniel Leite**. "Ensemble of Evolving Data Clouds and Fuzzy Models for Weather Time Series Prediction." Applied Soft Computing, Vol. 64, pp: 445-453, 2018.

[J6] Sergio Silva, Pyramo Costa, Alcyr Lacerda, Franciele Alves, Maury Gouvea, **Daniel Leite**. "High Impedance Fault Detection in Power Distribution Systems using Wavelet Transform and Evolving Neural Network." Electric Power Systems Research, Vol. 154, pp: 474-483, 2018.

[C15] Vania Mota, Flavio Damasceno, Eduardo Soares, **Daniel Leite**. "Fuzzy Clustering Methods Applied to the Evaluation of Compost Bedded Pack Barns." IEEE International Conference on Fuzzy Systems - Naples, 6p. 2017.

[C14] Eduardo Soares, Vania Mota, Ricardo Poucas, **Daniel Leite**. "Cloud-Based Evolving Intelligent Method for Weather Time Series Prediction." IEEE International Conference on Fuzzy Systems - Naples, 6p. 2017.

[J5] **Daniel Leite**, Pyramo Costa, Fernando Gomide. "A Review on Evolving Interval and Fuzzy Granular Systems." Learning and Nonlinear Models, Vol. 14, Issue 2, pp: 36-54, 2016.

[C13] **Daniel Leite**, Marcio Santana, Ana Borges, Fernando Gomide. "Fuzzy Granular Neural Network for Incremental Modeling of Nonlinear Chaotic Systems." IEEE World Congress on Computational Intelligence: International Conference on Fuzzy Systems, pp: 64-71, Jul. 2016.

[B4] Daniel Leite, Fernando Gomide. "Incremental Granular Fuzzy Modeling using Imprecise Data Streams." In: Fifty Years of Fuzzy Logic and Its Applications, Springer – Switzerland, Vol. 326, pp: 107-124, 2015.

[J4] **Daniel Leite**, Reinaldo Palhares, Victor Campos, Fernando Gomide. "Evolving Granular Fuzzy Model-Based Control of Nonlinear Dynamic Systems." IEEE Transactions on Fuzzy Systems, Vol. 23, pp: 923-938, 2015.

[C12] Lourenco Bueno, Pyramo Costa, Israel Mendes, Enderson Cruz, **Daniel Leite**. "Evolving Ensemble of Fuzzy Models for Multivariate Time Series Prediction." IEEE International Conf. on Fuzzy Systems, Istanbul, TR, 6p. Jul. 2015.

[C11] Daniel Leite, Pyramo Costa, Fernando Gomide. "Evolving Granular Systems." Joint Conference on Robotics and Intelligent Systems, Sao Carlos, BR, 12p. 2014.

[C10] **Daniel Leite**, Fernando Gomide, Walmir Caminhas, Andre Lemos, Reinaldo Palhares. "Parameter Estimation of Dynamic Fuzzy Models from Uncertain Data Streams." North American Fuzzy Information Processing Society Conference, Boston, US, pp: 1-7, Jun. 2014.

[J3] **Daniel Leite**, Pyramo Costa, Fernando Gomide. "Evolving granular neural networks from fuzzy data streams." Neural Networks, Vol. 38, pp: 1-16, 2012.

[C9] **Daniel Leite**, Pyramo Costa, Fernando Gomide. "Evolving granular neural network for fuzzy time series forecasting." World Congress on Computational Intelligence: IEEE International Joint Conference on Neural Networks, Brisbane, AU, 8p. Jun. 2012.

[C8] Andre Lemos, **Daniel Leite**, Leandro Maciel, Rosangela Ballini, Walmir Caminhas, Fernando Gomide. "Evolving fuzzy linear regression tree approach for forecasting sales volume of petroleum products." World Congress on Computational Intelligence: IEEE International Conference on Fuzzy Systems, Brisbane, AU, 8p. Jun. 2012.

[J2] **Daniel Leite**, Rosangela Ballini, Pyramo Costa, Fernando Gomide. "Evolving fuzzy granular modeling from nonstationary fuzzy data streams." Evolving Systems, Springer, Vol. 3, Issue 2, pp: 65-79, 2012.

[B3] **Daniel Leite**, Pyramo Costa, Fernando Gomide. "Interval approach for evolving granular system modeling." In: Learning in Non-stationary Environments: Methods and Applications, Springer – New York, pp: 271-300, 2012.

[C7] **Daniel Leite**, Fernando Gomide, Rosangela Ballini, Pyramo Costa. "Fuzzy granular evolving modeling for time series prediction." IEEE International Conference on Fuzzy Systems. Taipei, TW. 8p. Jun. 2011.

[B2] Daniel Leite, Fernando Gomide. "Evolving linguistic fuzzy models from data streams." Studies in Fuzziness and Soft Computing: A Homage to Abe Mamdani, Springer, pp: 209-223, 2012.

[C6] Daniel Leite, Pyramo Costa, Fernando Gomide. "Evolving granular neural network for semi-supervised data stream classification." World Congress on Computational Intelligence: IEEE Joint Conference on Neural Networks. Barcelona, ES. pp: 1877-1884, Jul. 2010.

[B1] Daniel Leite, Pyramo Costa, Fernando Gomide. "Granular approach for evolving systems modeling." Lecture Notes in Artificial Intelligence (LNAI/IPMU). Vol. 6178, pp: 340-349. Springer – Heidelberg, 2010.

[J1] **Daniel Leite**, Michel Hell, Pyramo Costa, Fernando Gomide. "Real-time fault diagnosis of nonlinear systems." Nonlinear Analysis: Theory, Methods & Applications. Vol. 71-12, pp: 2665-2673, Dec. 2009.

[C5] Daniel Leite, Pyramo Costa, Fernando Gomide. "Evolving granular classification neural networks." IEEE International Joint Conference on Neural Networks. Atlanta, US. pp: 1736-1743, Jun. 2009.

[C4] Daniel Leite, Romis Attux, Fernando Von Zuben, Pyramo Costa, Fernando Gomide. "Evolutionary neural network applied to induction motors stator fault detection." IEEE International Electric Machines and Drives Conference. Miami, pp: 1721-1728, May 2009.

[C3] Daniel Leite, Pyramo Costa, Fernando Gomide. "Interval-based evolving modeling." IEEE Symposium Series on Computational Intelligence: Workshop on Evolving Systems. Nashville, US. pp: 1-8, Mar. 2009.

[C2] Daniel Leite, Michel Hell, Pyramo Costa. "Real-time model-based fault detection and diagnosis for alternators and induction motors." IEEE International Electric Machines and Drives Conference. Antalya, TR. pp: 202-207, May 2007.

[C1] Daniel Leite, Pyramo Costa. "Induction motors modeling and fuzzy logic based turn-to-turn fault detection and localization." IEEE International Conf. on Power Eng., Energy and Electrical Drives. Setubal, PT. pp: 90-95, Apr. 2007.

#### **Citations to Publications**

Scopus:	254
Google Scholar:	441

#### **Selected Talks**

[T] Talk [I] Invited Talk

[T14] High Impedance Fault Detection in Time-Varying Distributed Generation Systems using Adaptive Neural Networks. World Congress on Computational Intelligence, Rio de Janeiro, BR, 2018.

[T13] Cloud-Based Evolving Intelligent Method for Weather Time Series Prediction IEEE International Conference on Fuzzy Systems, Naples, IT, 2017.

[T12] Fuzzy Clustering Methods Applied to the Evaluation of Compost Bedded Pack Barns IEEE International Conference on Fuzzy Systems, Naples, IT, 2017.

[15] Evolving Granular Modeling from Uncertain Data Streams Invited plenary talk at IEEE Conference on Evolving and Adaptive Intelligence Systems, Natal, BR, 2016.

[ T11 ] Evolving Ensemble of Fuzzy Models for Multivariate Time Series Prediction IEEE International Conference on Fuzzy Systems, Istanbul, TR, 2015.

[14] Evolving Neuro-Fuzzy Network Applied to Incipient Detection of Parkinson's Disease Invited talk at Pontifical Catholic University of Minas Gerais, Belo Horizonte, BR, 2015. [ T10 ] Evolving Granular Systems Joint Conference on Robotics and Intelligent Systems, Sao Carlos, BR, 2014.

[T9] Parameter Estimation of Dynamic Fuzzy Models from Uncertain Data Streams North American Fuzzy Information Processing Society Conference, Boston, US, 2014.

[13] Granular Computing Invited talk at the Faculty of Mathematics: Federal University of Uberlandia, Uberlandia, BR, 2012.

[T8] Evolving Granular Neural Network for Fuzzy Time Series Forecasting World Congress on Computational Intelligence, Brisbane, AU, 2012.

[T7] Evolving Fuzzy Linear Regression Tree Approach for Forecasting Sales Volume of Petroleum Products World Congress on Computational Intelligence, Brisbane, AU, 2012.

[T6] Fuzzy Granular Evolving Modeling for Time Series Prediction IEEE International Conference on Fuzzy Systems, Taipei, TW, 2011.

[T5] Evolving Granular Neural Network for Semi-supervised Data Stream Classification World Congress on Computational Intelligence, Barcelona, ES, 2010.

[T4] Granular Approach for Evolving Systems Modeling International Conference on Information Processing and Management of Uncertainty, Dortmund, GE, 2010.

[T3] Evolving Granular Classification Neural Networks IEEE International Joint Conference on Neural Networks, Atlanta, US, 2009.

[ I2 ] Evolving Intelligent Systems

Invited talk at Pontifical Catholic University of Minas Gerais, Belo Horizonte, BR, 2009.

[T2] Real-Time Fault Diagnosis of Nonlinear Systems World Congress of Nonlinear Analysts, Orlando, US, 2008.

[T1] Induction Motors Modeling and Fuzzy Logic Based Turn-To-Turn Fault Detection IEEE Conference on Power Engineering, Setubal, PT, 2007.

[11] Fuzzy Rule-Based Systems in Fault Diagnosis Invited talk at Pontifical Catholic University of Minas Gerais, Belo Horizonte, BR, 2007.

#### **Associate Editor**

2018 – Evolving Systems

#### **Journal Reviewer**

- 2018 Mathematics and Computers in Simulation
- 2018 IEEE Transactions on Cybernetics
- 2017 Signal Processing
- 2016 IEEE Transactions on Industrial Electronics
- 2015 Fuzzy Optimization and Decision Making
- 2014 Neural Computing and Applications
- 2014 Computational and Mathematical Methods in Medicine
- 2013 International Journal of Machine Learning and Cybernetics
- 2013 Applied Soft Computing
- 2013 Expert Systems with Applications
- 2013 International Journal of Electrical Power & Energy Systems
- 2013 Soft Computing
- 2013 Information Sciences
- 2012 IEEE Transactions on Fuzzy Systems
- 2012 IEEE Systems Journal

- 2012 IEEE Transactions on Neural Networks and Learning Systems
- 2011 Journal of Robotics
- 2010 Evolving Systems

#### **Conference Reviewer**

IJCNN'19 - International Joint Conference on Neural Networks, 2019 IFAC'18 - IFAC Symposium on Robust Control Design, 2018 NAFIPS'18 - North American Fuzzy Information Processing Society Annual Conference, 2018 EAIS'18 - IEEE Conference on Evolving and Adaptive Intelligent Systems, 2018 WCCI'18 - World Congress on Computational Intelligence, 2018 FUZZ-IEEE'18 - IEEE International Conference on Fuzzy Systems, 2018 IJCNN'18 - International Joint Conference on Neural Networks, 2018 EAIS'17 - IEEE Conference on Evolving and Adaptive Intelligent Systems, 2017 IJCNN'17 - International Joint Conference on Neural Networks, 2017 EAIS'16 - IEEE Conference on Evolving and Adaptive Intelligent Systems, 2016 WCCI'16 - World Congress on Computational Intelligence, 2016 FUZZ-IEEE'16 – IEEE International Conference on Fuzzy Systems, 2016 FUZZ-IEEE'15 - IEEE International Conference on Fuzzy Systems, 2015 SBAI'15 - Simpósio Brasileiro de Automação Inteligente, 2015 CBIC'15 - Brazilian Congress on Computational Intelligence, 2015 ICMLA'15 - International Conference on Machine Learning and Applications, 2015 SSCI'14 - Symposium Series on Computational Intelligence, 2014 WCCI'14 - World Congress on Computational Intelligence, 2014 FUZZ-IEEE'14 – IEEE International Conference on Fuzzy Systems, 2014 CBSF'14 - Brazilian Congress on Fuzzy Systems, 2014 CBA'14 - Congresso Brasileiro de Automática, 2014 ICACCI'14 - International Conference on Advances in Computing, Communications & Informatics, 2014 ICMLA'13 - International Conference on Machine Learning and Applications, 2013 FUZZ-IEEE'13 - IEEE International Conference on Fuzzy Systems, 2013 SSCI'13 - Symposium Series on Computational Intelligence, 2013 EAIS'13 – Workshop on Evolving and Adaptive Intelligent Systems, 2013 CBSF'12 - Brazilian Congress on Fuzzy Systems, 2012 WCCI'12 - World Congress on Computational Intelligence, 2012 FUZZ-IEEE'12 – IEEE International Conference on Fuzzy Systems, 2012 SBAI'11 - Simpósio Brasileiro de Automação Inteligente, 2011 FUZZ-IEEE'11 - IEEE International Conference on Fuzzy Systems, 2011 SSCI'11 - Symposium Series on Computational Intelligence, 2011 EAIS'11 – Workshop on Evolving and Adaptive Intelligent Systems, 2011 WCCI'10 - World Congress on Computational Intelligence, 2010 FUZZ-IEEE'10 - IEEE International Conference on Fuzzy Systems, 2010 ICEM'10 - International Conference on Electrical Machines, 2010 CBA'10 - Congresso Brasileiro de Automática, 2010 IEMDC'09 - IEEE International Electric Machines and Drives Conference, 2009 ICIT'08 - IEEE International Conference on Industrial Technology, 2008 IEMDC'07 - IEEE International Electric Machines and Drives Conference, 2007

#### **Conference/Seminar Organization**

EAIS'20 – IEEE Conf. on Evolving and Adaptive Intelligent Systems, 2020 (Program committee member) DEEP-ML'19 – International Conference on Deep Learning and Machine Learning in Emerging Applications,

2019 (Program committee member) FUZZ-IEEE'18 – IEEE International Conference on Fuzzy Systems, 2018 (Chair: Knowledge Management, Data Bases, and Information Retrieval; Fuzzy Control)

EAIS'18 – IEEE Conf. on Evolving and Adaptive Intelligent Systems, 2018 (Program committee member) CCS'17/2 – III Colloquium on Control Systems, 2017 (General coordinator – Local event: DEG/UFLA) SFS'17/2 – IV Seminar on Fuzzy Systems, 2017 (General coordinator – Local event: DEG/UFLA)
CCS'17/1 – II Colloquium on Control Systems, 2017 (General coordinator – Local event: DEG/UFLA)
SFS'17/1 – III Seminar on Fuzzy Systems, 2017 (General coordinator – Local event: DEG/UFLA)
EAIS'17 – IEEE Conf. on Evolving and Adaptive Intelligent Systems, 2017 (Program committee member)
CCS'16/2 – I Colloquium on Control Systems, 2016 (General coordinator – Local event: DEG/UFLA)
SFS'16 – II Seminar on Fuzzy Systems, 2016 (General coordinator – Local event: DEG/UFLA)
EAIS'16 – IEEE Conf. on Evolving and Adaptive Intelligent Systems, 2016 (Program committee member)
SFS'15 – I Seminar on Fuzzy Systems, 2015 (General coordinator – Local event: DEG/UFLA)
FUZZ-IEEE'12 – IEEE International Conference on Fuzzy Systems, 2012 (Chair: Real-World Applications V)
SBAI'11 – Brazilian Symposium on Intelligent Automation, 2011 (Session chair: Intelligent Systems III)

#### Academic Advising

2018 -	MSc student: Danyellen Gonçalves Evolving Intelligent Control of Mobile Robots via Brain-Computer Interface
2018 -	Undergraduate student: Karolina Cardoso Faria Spatio-Temporal Pattern Recognition of Brain Signals from EEG Data
2018 -	MSc student: Daniele Aparecida de Oliveira Silva (co-supervision) Online Monitoring and Fuzzy Control of the Roasting Conditions of Arabica Coffee
2018 -	MSc student: Jordann Alessander Rosa Almeida LMI Functional Fuzzy Control of Nonlinear Chaotic Systems
2018 -	Undergraduate student: Mateus Santos Neural Networks applied to Commodity Price Forecasting: A Study on Arabica Coffee
2017 –	MSc student: Tamyres Pereira On Similarity and Aggregation of Heterogeneous Data Streams
2017 –	MSc student: João Paulo de Oliveira Tavares (co-supervision) Intelligent Evolving Fuzzy Control for Autonomous Vehicle Navigation
2018 - 2018	Undergraduate student: Carla Freitas Amaral Fuzzy and PID Approaches for Distillation Column Control
2017 - 2018	Undergraduate student: Clayton Henrique da Silva Brain-Computer Interface for Controlling Mobile Robots
2017 - 2018	MSc student: Cristiano Mesquita Garcia Incremental Missing Data Imputation via Modified Granular Evolving Fuzzy Model
2017 - 2018	Undergraduate student: Charles Aguiar Intelligent Fuzzy Control of Gantry Crane Systems
2016 - 2018	MSc student: Stella Marys Dornelas Lamounier Incremental Fuzzy Modeling for Early Detection and Severity Estimation of the Parkinson's Disease based on Speech Signals
2015 - 2018	PhD student: Vania Correa Mota (co-supervision) On Fuzzy Rule Based and Geostatistical Approaches for Feature Evaluation in Compost Bedded Pack Barns
2017 – 2018	MSc student: Fabricio Pereira Lucas (co-supervision) Evolving Granular Neural Network applied to High Impedance Fault Detection in Distribution Networks
2017 - 2018	Undergraduate student: Larissa de Souza Pinto Adaptive Fuzzy Control for Autonomous Navigation in Unknown Environments
2017 - 2018	Undergraduate student: Jordann Alessander Rosa Almeida LMI Functional Fuzzy Control based on Parallel Distributed Compensation

2017 - 2017	Undergraduate student: Celio Augusto Terra de Souza Interval Control of Linear Systems with Unstructured Parametric Uncertainty
2015 - 2017	MSc student: Eduardo Almeida Soares Rule-based Evolving Systems for Weather Time Series Prediction
2015 - 2017	MSc student: Ricardo de Paula Poucas Data Clouds and Granule-based Evolving Models for Spam Detection
2017 - 2017	Undergraduate students: Nathalia Souza, Isabella Oliveira (co-supervision) Instrumentation and Automation of a Corn Milling Plant
2015 - 2017	MSc student: Marcio Wladimir Santana Incremental Clustering of Data Streams for Power Quality Monitoring and Analysis
2016 - 2016	Undergraduate student: Ariadne de Lourdes Justi Bertonlin (co-supervision) On the use of the Synchronous Reference Frame and the IEEE Standard 1459 for Calculating the Electric Power of Systems subject to Voltage Fluctuations
2015 - 2016	MSc student: Sergio Ribeiro Silva (co-supervision) High Impedance Fault Detection in Medium Voltage Networks Using Wavelet Transform and Evolving Artificial Neural Network
2015 - 2016	Undergraduate student: Luciano Henrique Silveira Melo Intelligent Low-Cost Temperature Monitoring: PLC interfacing Arduino
2015 - 2016	Undergraduate student: Ana Paula Ribeiro Borges Induction Motors Stator Windings Fault Detection via Supervised Neural Networks
2015 - 2015	Undergraduate Student: Maria Tailani Borges Adaptive Fuzzy Control for Robust Sensor-Based Navigation
2015 - 2015	Undergraduate Student: Lucas Marques Adaptive Fuzzy Control for Autonomous Navigation and Obstacle Avoidance
2015 - 2015	Undergraduate Student: Bruna Cunha Adaptive Fuzzy Modeling for Meteorological Time Series Prediction
2015 - 2015	Undergraduate Student: Thiago Juvenal Ribeiro Evolving Fuzzy Modeling Applied to Biomedical Data Classification
2015 - 2015	Undergraduate student: Elias Fornazari Garcia Supervised Neural Networks Applied to Power Generation Systems Modeling
2014 - 2014	Undergraduate Student: Lais Souza Ramos Adaptive Fuzzy Control for Robust Sensor-Based Navigation
2013 - 2015	MSc Student: Lourenco Bueno (co-supervision) Evolving Ensemble of Fuzzy Models for Multivariate Time Series Prediction
2011 - 2013	MSc Student: Enderson Cruz (co-supervision) Intelligent Evolving Systems Applied to Time Series Prediction
2011 - 2013	MSc Student: Israel Mendes (co-supervision) Evolving Intelligent Embedded Systems
2009 - 2009	Undergraduate Student: Lucas Nascimento Artificial Neural Networks for Incipient Fault Detection in Power Transformers
2008 - 2008	Undergraduate Student: Alan Barbosa Principal Component Analysis for Fault Detection and Diagnosis

# **Thesis and Dissertation Committees**

2019	MSc Dissertation – Leonardo Schick (UFSCAR) Distributed d-FuzzStream: Nonsupervised Distributed Fuzzy Clustering in Continuous Data Streams
2019	MSc Dissertation – Brendo Silva Barbosa (PUC-MG) Virtual Sensors for Detection and Location of Partial Discharge in Power Transformers
2018	MSc Dissertation – Cristiano Mesquita Garcia (UFLA) Incremental Missing Data Imputation via Modified Granular Evolving Fuzzy Model
2018	MSc Dissertation – Stella Marys Dornelas Lamounier (UFLA) Incremental Fuzzy Modeling for Early Detection and Severity Estimation of the Parkinson's Disease based on Speech Signals
2018	PhD Thesis – Vania Correa Mota (UFLA) On Fuzzy Rule Based and Geostatistical Approaches for Feature Evaluation in Compost Bedded Pack Barns
2018	MSc Dissertation – Fabricio Pereira Lucas (PUC-MG) Evolving Granular Neural Network applied to High Impedance Fault Detection in Distribution Networks
2017	MSc Dissertation – Eduardo Almeida Soares (UFLA) Rule-based Evolving Systems for Weather Time Series Prediction
2017	MSc Dissertation – Ricardo de Paula Pouças (UFLA) Data Clouds and Granule-based Evolving Models for Spam Detection
2017	MSc Dissertation – Rita Georgina Guimarães (UFLA) Improving Sentiment Analysis in Social Networks using Lexical Resources and User Profiles
2017	PhD Thesis – Orlando Donato Rocha Filho (UFMA) Maximum-Likelihood Evolving Fuzzy Clustering Applied to Nonstationary Dynamic Systems
2017	MSc Dissertation – Marcio Wladimir Santana (UFLA) Incremental Clustering of Data Streams for Power Quality Monitoring and Analysis
2017	MSc Dissertation – Bruno Elyezer Fonseca (UFLA) Automation of a Cyclone Particle Dryer: Computational Intelligence
2017	MSc Dissertation – Franciele Aparecida de Souza (PUC-MG) Analysis of Artificial Neural Network Models for Electroencephalogram-based Classification of Motor Imagery
2017	MSc Dissertation – Thais Martins Mendes (UFLA) Multidimensional Monitoring and Novelty Detection for Power Quality
2016	MSc Dissertation – Oscar Hernan Samudio Legarda (PUC-RJ) A Fuzzy Classification System for High Dimensionality Problems
2016	MSc Dissertation – Sergio Ribeiro Silva (PUC-MG) High Impedance Fault Detection in Medium Voltage Networks Using Wavelet Transform and Evolving Artificial Neural Network
2015	MSc Dissertation – Alcyr Silva Lacerda (PUC-MG) Computational Intelligence Applied to Power Distribution Systems Fault Detection
2015	MSc Dissertation – Adalberto Mendes (UFLA) Implementation of a Board Game in an Embedded System
2015	MSc Dissertation – Lourenco Alves Campos Bueno (PUC-MG) Evolving Ensemble of Fuzzy Models for Multivariate Time Series Prediction

2015	PhD Thesis – Leandro dos Santos Maciel (UNICAMP) Evolving Possibilistic Fuzzy Modeling		
2014	PhD Thesis – Alisson Silva (UFMG) Evolving Neurofuzzy Systems: New Learning Algorithms and Applications		
2013	MSc Dissertation – Fernando Luis Bordignon (UNICAMP) Extreme Learning for Uninorm-based Neurofuzzy Networks		
2013	MSc Dissertation – Enderson Cruz (PUC-MG) Evolving Intelligent Systems Applied to Time Series Prediction		
2011	MSc Dissertation – Luiz Eduardo Bergo Jr (PUC-MG) Granular Evolving Neuro-Fuzzy Approach for Dynamic Coupling of Moving Trains		
Research and	d Development Projects		
2018 -	Pattern Recognition and Intelligent Control of Mobile Robots via Brain-Machine Interface Funded by: FAPEMIG (Role: Coordinator)		
2017 –	On Similarity, Aggregation and Incremental Learning from Heterogeneous Data Streams Partially Funded by: UL (Role: Coordinator/Researcher. This is also the title of the project of my postdoctoral position at the University of Ljubljana). Supported by: UFLA		
2016 -	Development and Computational-Intelligence-Based Control of Hand Prosthesis Supported by: UFLA (Role: Participant Researcher)		
2015 -	Development of a Virtual Measurement System for Induction Motors Fault Analysis Funded by: UFLA (Role: Participant Researcher)		
2015 -	Adaptive Fuzzy Modeling for Meteorological Time Series Prediction Supported by: UFLA (Role: Coordinator)		
2015 -	Fuzzy Evolving Modeling Applied to Biomedical Data Classification Supported by: UFLA (Role: Coordinator)		
2014 - 2018	Adaptive Fuzzy Control for Sensor-based Robust Navigation Funded by: CAPES (Role: Coordinator)		
2014 - 2017	Computational Intelligence Applied to Biomedical Signal Processing Funded by: CNPq (Role: Participant Researcher)		
2013 - 2014	Evolving Granular Control of Nonlinear Dynamic Systems Funded by: CNPq (Individual Project – 1 <sup>st</sup> postdoctoral position)		
2012 - 2015	Evolving Intelligent Systems for Monthly Weather Forecast Funded by: Votorantim Group, ANEEL (Role: External Collaborator)		
2008 - 2012	Evolving Granular Systems Funded by: CAPES (Individual Project - PhD)		
2006 - 2010	Development of a Power Transformer Diagnosis Center for Transmission Substations Funded by: CEMIG, ANEEL (Role: Participant Researcher)		
2004 - 2007	Fault Detection and Diagnosis in Synchronous Hydrogenerators Funded by: CEMIG, ANEEL (Role: Participant Researcher)		

# **Professional Affiliations**

IEEE Computational Intelligence Society IEEE System, Man, and Cybernetics Society IEEE Control Systems Society International Federation of Automatic Control