José Ortiz Bejar

Curriculum Vitae

Edificio Ω II, Ciudad Universitaria.
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PROFESSIONAL PREPARATION

2016 – 2020	**Ph.D. in Data Science**, *INFOTEC Centro de Investigación e Innovación en Tecnologías de la Información y Comunicación*, Aguascalientes, México.
2005 – 2007	**M.Sc. in Electrical Engineering with option in Computer Science**, *Faculty of Electrical Engineering*, Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacán, México.
1998 – 2003	**B. S. Electrical Engineering**, *Faculty of Electrical Engineering*, Universidad Michoacana de San Nicolás de Hidalgo, Morelia, Michoacán, México.

Appointments

2021 – to date	**Assistant Professor**, *Universidad Michoacana de San Nicolás de Hidalgo*, Faculty of Electrical Engineering, Morelia, Michoacán, México.
2010 – 2021	**Research assistant**, *Universidad Michoacana de San Nicolás de Hidalgo*, Postgraduate Division of the Faculty of Electrical Engineering, Morelia, Michoacán, México.
2019 – 2020	**Lecturer**, *INFOTEC Centro de Investigación e Innovación en Tecnologías de la Información y Comunicación*, Aguascalientes, Aguascalientes, México.
Jan – Jun 2018	**Lecturer**, *Universidad Panamericana*, Campus Bonaterra, Aguascalientes, Aguascalientes, México.
2008 – 2016	**Lecturer**, *Universidad Michoacana de San Nicolás de Hidalgo*, Faculty of Electrical Engineering, Morelia, Michoacán, México.
2006 – 2010	**Software Developer and System Administrator**, *Subdirección de Ingresos*, State Government of Michoacán de Ocampo, Morelia, Michoacán, México.

Honors

2022 – 2026	Member of the National Research System, Level I, National Council of Science and Technology (CONACyT), Mexico.
2020	Third place in the Best Thesis Award "José Negrete Martínez" Doctoral Thesis Category, October 2020.
2019	"Programa Apoyo a Talento", under the modality of scholarships, in the specialty or postgraduate degree related to Science, Technology, and Innovation of the State in Aguascalientes, September 2019.
2018	Best team at Aggressiveness Identification Task at MEX-A3T Competition. IberEval 2018 workshop of the SEPLN Conference September 18, 2018.
2018	Best team at the Tasks 4: Good or Bad News? Emotional categorization of news articles. TASS 2018 workshop of the SEPLN Conference September 18, 2018.
2018	Best team at the HAHA 2018: Humor Analysis based on Human Annotation.Evaluation of Human Language Technologies for Iberian Languages Workshop (IberLEFT 2018).
2017	First place award at RedICA Text-Image Matching (RICATIM) Challenge. September 7, 2017.

Peer-reviewed Publications (Journal Articles Indexed in JCR)

2022   Fernando Ornelas-Tellez, **José Ortiz-Bejar**, J. Rico-Melgoza, & P. Esquivel. "Optimization and control for a DC microgrid". *Optimal Control Applications and Methods.*, doi: https://doi.org/10.1002/oca.2951 Impact Factor (2021): **1.955**

2022   **José Ortiz-Bejar**, Mario Arrieta Paternina, Lucas Lugnani & Eric S. Tellez. "Power system coherency assessment by the affinity propagation algorithm and distance correlation". *Sustainable Energy, Grids and Networks*, doi: https://doi.org/10.1016/j.segan.2022.100658 Impact Factor (2021): **3.899**

2021   Nestor González-Cabrera, **José Ortiz-Bejar**, Alejandro Zamora-Mendez, & Mario Arrieta Paternina."On the Improvement of representative demand curves via a hierarchical agglomerative clustering for power transmission network investment". *Energy, 222, 119989*, doi: 10.1016/j.energy.2021.119989. Impact Factor (2020): **7.147**

2020   **José Ortiz-Bejar**, Eric S. Téllez, Mario Graff, Daniela Moctezuma, & Sabino Miranda-Jiménez. "Improving k Nearest Neighbors and Naïve Bayes Classifiers Through Space Transformations and Model Selection". *IEEE Access, 8, 221669-221688*, doi: 10.1109/ACCESS.2020.3042453. Impact Factor (2019): **3.745**

2018   Daniel Guillen, Mario Arrieta **José Ortiz-Bejar**, Rajesh K. Tripathy, Alejandro Zamora-Mendez, Rubén Tapia-Olvera and Eric S Tellez. "Fault detection and classification in transmission lines based on a PSD index". *IET Generation, Transmission and Distribution*, doi: 10.1049/iet-gtd.2018.5062. Impact Factor (2018): **3.229**.

2018   Mario Arrieta-Paternina, Alejandro Zamora-Mendez, **José Ortiz-Bejar**, Joe H. Chow, and Juan M. Ramirez. "Identification of coherent trajectories by modal characteristics and hierarchical agglomerative clustering". *Electric Power Systems Research*, doi: 10.1016/j.epsr.2017.12.029. Impact Factor (2018): **3.022**.

Peer-review Publications CONACyT Quality Index

2019   Luis Pellegrin, Octavio Loyola-González, **José Ortiz-Bejar**, Miguel Angel Medina-Pérez, Andres Eduardo Gutierrez-Rodríguez, Eric S Tellez, Mario Graff, Sabino Miranda-Jiménez, Daniela Moctezuma, Eduardo F. Morales, Alicia Morales-Reyes, and Hugo Jair Escalante. "Image Annotation as Text-Image Matching: Challenge Design and Results". Submitted to *Computación y Sistemas*. Included in the registry of excellence magazines of the Mexican National Council of Science and Technology (CONACyT).

Conferences and Workshops (Indexed in Scopus)

URUCON 2021   **José Ortiz-Bejar** and Jesús Ortiz-Bejar. "Design and Implementation of Digital Platform for e-Government". *IEEE URUCON (URUCON 2021)*, Virtual conference, Montevideo, Uruguay, November 2021.

FIRE 2020   **José Ortiz-Bejar**, Jesús Ortiz-Bejar, Jaime Cerda-Jacobo, Mario Graff and, Eric S Tellez. "UMSNH-INFOTEC@Dravidian-CodeMix-FIRE2020: An ensemble approach based on a multiple text representations". *Forum for Information Retrieval Evaluation (FIRE2020)*, Virtual Event Hosted by IDRBT, Hyderabad, India, December 2020.

ROPEC 2020   **José Ortiz-Bejar**, Jesús Ortiz-Bejar, Alejandro Zamora-Mendez, Garibaldi Pineda-García, Mario Graff and, Eric S Tellez. "Forecasting without context problem". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2020)*, Morelia, Michoacan, México, November 2020. IEEE.

ROPEC 2019   **José Ortiz-Bejar**, Mario Graff, Eric S Tellez, Jesús Ortiz-Bejar, Jaime Cerda Jacobo and Alejandro Zamora-Mendez. "Performance Analysis of K-Means Seeding Algorithms". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2019)*, Ixtapa, Guerrero, México, November 2019. IEEE.

IberLEF 2019   **José Ortiz-Bejar**, Eric S Tellez, Mario Graff, Daniela Moctezuma, Sabino Miranda-Jiménez. "INGEOTEC at IberLEF 2019 Task HAHA". CEURWS.org, 2421: 203-211. Spain, September 2019.

ROPEC 2018   **José Ortiz-Bejar**, Mario Graff, Eric S Tellez, Jesús Ortiz-Bejar, Jaime Cerda Jacobo. "k-Nearest Neighbor Regressors Optimized by using Random Search". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2018)*, Ixtapa, Guerrero, México, November 2018. IEEE.

IberEval 2018   Mario Graff, Sabino Miranda-Jiménez, Eric S Tellez, Daniela Moctezuma, Vladimir Salgado, **José Ortiz-Bejar**, Claudia N Sánchez."INGEOTEC at MEX-A3T: Author profiling and aggressiveness analysis in Twitter using μTC and EvoMSA". CEURWS.org, 2150: 128-133. Spain, September 2018 (**first place on aggressiveness task**).

IberEval 2018   **José Ortiz-Bejar**, Vladimir Salgado, Mario Graff, Daniela Moctezuma, Sabino Miranda-Jiménez, Eric S Tellez."INGEOTEC at IberEval 2018 Task HaHa: μTC and EvoMSA to Detect and Score Humor in Texts". CEURWS.org, 2150: 195-202. Spain, September 2018 (**first place**).

TASS 2018   Daniela Moctezuma, **José Ortiz-Bejar**, Eric S Tellez, Sabino Miranda-Jiménez, Mario Graff. "INGEOTEC solution for Task 4 in TASS'18 competition". CEURWS.org, 2172: 111-117. Spain, September 2018 (**first place**).

TASS 2018   Daniela Moctezuma, **José Ortiz-Bejar**, Eric S Tellez, Sabino Miranda-Jiménez, Mario Graff. "INGEOTEC solution for Task 1 in TASS'18 competition". CEURWS.org, 2172: 45-49. Spain, September 2018.

PAN at CLEF 2018   Eric S Tellez, Sabino Miranda-Jiménez, Daniela Moctezuma, Mario Graff, Vladimir Salgado, **José Ortiz-Bejar**. "Gender Identification through Multi-modal Tweet Analysis using Microtc and Bag of Visual Words". CEURWS.org, 2125: 1-12. France, September 2017.

ROPEC 2017   **José Ortiz-Bejar**, Eric S Tellez, Mario Graff, Sabino Miranda-Jiménez, Jesús Ortiz-Bejar, Daniela Moctezuma, Claudia N. Sánchez. "I3GO+ at RICATIM 2017: A semi-supervised approach to determine the relevance between images and text-annotations", *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2017)*, Ixtapa, Guerrero, México, November 2017. IEEE.

ROPEC 2016   Juan J Flores, Felix Calderon, José R Cedeño Gonzalez, **José Ortiz** and Rodrigo Lopez Farias. "Comparison of time series forecasting techniques with respect to tolerance to noise". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2016)*, Ixtapa, Guerrero, México, November 2016. IEEE.

ROPEC 2015   Juan J Flores, **José Ortiz**, José R Cedeno González, Carlos Lara and Rodrigo López Farías. "FNN a fuzzy version of the nearest neighbor time series forecasting technique". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2015)*, Ixtapa, Guerrero, México, November 2015. IEEE.

PSC 2015   Fernando Ornelas-Tellez, **José Ortiz-Bejar**, JJ Rico, Edgar N Sanchez. "Optimal operation and control for an electrical micro-grid". *Clemson University Power Systems Conference (PSC 2015)*. Clemson, SC, USA, March 2015. IEEE.

ROPEC 2015   Mario Graff, Eric S Tellez, Hugo Jair Escalante, **José Ortiz-Bejar**, "Memetic Genetic Programming based on orthogonal projections in the phenotype space", *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2015)*, Ixtapa, Guerrero, Mexico, November 2015. IEEE.

ROPEC 2014   Mario Graff, Juan J Flores, **José Ortiz Bejar**. "Genetic Programming: Semantic point mutation operator based on the partial derivative error." *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2014)*, Ixtapa, Guerrero, November 2014. IEEE.

ROPEC 2014   Eric S Tellez, Edgar Chávez, **José Ortiz Bejar**. "Scalable proximity indexing with the list of clusters". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2014)*, Ixtapa, Guerrero, November 2014. IEEE.

ROPEC 2014	**José Ortiz Bejar**, Juan J Flores Romero and Garibaldi Pineda García. "Qualitative simulation over two-parameter bifurcation diagrams". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2014)*, Ixtapa, Guerrero, November 2014. IEEE.
ROPEC 2013	Garibaldi Pineda García, **José Ortiz Bejar**, Francisco Mercado Miramontes. "A prototype helping device for the visually impaired using an optical to mechanical transducer". *IEEE International Autumn Meeting on Power, Electronics and Computing (ROPEC 2013)*, Ixtapa, Guerrero, November 2013. IEEE.
CERMA 2007	Eric S Tellez, **José Ortiz** and Mario Graff. "Pgsync: A multiple-reader/single-writer table replication tool for high loaded distributed relational sql databases". *Electronics, Robotics and Automotive Mechanics Conference (CERMA 2007)*. Cuernavaca, Morelos, Mexico, September 2007. IEEE.

Supervisory Experience

2022	(Co-advisory)Arturo Amanenchekua Solorzano Rodríguez. "Prototype selection using distance-based sampling methods" (in Spanish - with hounors). **B.S.** student. Universidad Michoacana de San Nicolás de Hidalgo.
2015	Christian Viveros-Tapia. "Storm Path Visualization Using Time Windows and K-Means" (in Spanish). **B.S.** student. Universidad Michoacana de San Nicolás de Hidalgo.
2013	José F. Mercado-Miramontes. "Design and Implementation of a Helping Depth Detection Device for Visually Impaired" (in Spanish). **B.S.** student. Universidad Michoacana de San Nicolás de Hidalgo.
2012	Luis A. Feregrino. "Computational Resources Administration using Xgrid" (in Spanish). **B.S.** student. Universidad Michoacana de San Nicolás de Hidalgo.