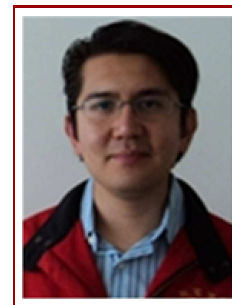


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*Apply the knowledge with professionalism and ethics
to collaborate in the scientific and technological
development of my region*

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Education

2007–2011 **Ph.D. in Electrical Engineering**, *CINVESTAV- IPN*, Mexico City, Mexico, Professional license number: 9252482.

2004–2006 **Master Degree in Automatic Control**, *CINVESTAV- IPN*, Mexico City, Mexico, Professional license number: 7885713.

1998–2003 **B.S. in Mechatronics Engineering**, *National Polytechnic Institute*, Mexico City, Mexico, Professional license number: 4167747.

Experience

April 2011 – **Lecturer**, *UPIITA - National Polytechnic Institute (IPN)*, Advanced Technologies Department and Graduate Section, Mexico City, Mexico.
At present

August 2010 – April 2011 **Lecturer**, *ESIME-Zacatenco - IPN*, Communications Academy, Mexico City, Mexico.

January 2004 – July 2004 **Lecturer**, *CECyT 3 - IPN*, Digital Systems Academy, Mexico City, Mexico.

June 2003 – **Project Engineer**, *PIDITEC*, *Superior Court of Justice*, Mexico City, Mexico.
December
2003

Computer Skills

Languages C, Python, Visual Basic, HTML, LATEX, ROS

Other skills Auto CAD, Flash, SolidWorks, Linux, SimMechanics, MATLAB, ANSYS, Mathematica, Microsoft Office

Academic Societies

IEEE Affiliation Number: 93011069 (Control Systems, Vehicular Technology)

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Languages

- Spanish (native speaker)
- English (580 pts Toeff ITP)
- French (500 hrs course/ Non-certified)

Research Interests

- Robotics
- Robust Control and Estimation of Mechatronic Systems
- Algebraic methods of parameter identification and state estimation in dynamic systems
- Active Disturbance Rejection Control

Publications

Books

- B1 H. Sira-Ramírez, **A. Luviano-Juárez**, M. Ramírez-Neria, E.W. Zurita-Bustamante. Disturbance Rejection Control Of Dynamic Systems: A Flatness Based Approach. Elsevier, June 2017. ISBN : 978-0-128-49868-2.
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- J4 L.A. Castañeda, L. Guzmán-Vargas, I. Chairez, **A. Luviano-Juárez***, Output based bilateral adaptive control of partially known robotic systems, Control engineering practice, **Accepted**, ISSN: 0967-0661. Impact Factor: 3.193, Q2 (Automation & Control Systems, JCR 2019)
- J5 M. Ramírez-Neria, Z. Gao, H. Sira-Ramírez, R. Garrido-Moctezuma, **A. Luviano-Juárez***, On the tracking of fast trajectories of a 3DOF Torsional Plant: A Flatness Based ADRC Approach, Asian Journal of Control, **Accepted**, ISSN: 1934-6093, Impact Factor: 2.779, Q2 (Automation & Control Systems, JCR 2019)
- J6 B. Aguirre-Hernández, R. Villafuerte-Segura, **A. Luviano-Juárez**, J. Cortés-Romero, Theoretical and Applied Contributions to Robust Stability Analysis of Complex Systems, Complexity, 2020, pp. 1–2 ISSN: 1076-2787. Impact Factor: 2.462, Q2 (Mathematics, Multidisciplinary Applications, JCR 2019)
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- RA1 I.Y. Paez-Pidiache, N.B. Lozada-Castillo, **A. Luviano-Juárez**, Caracterización de las SMAs y sus aplicaciones: Una revisión. *Pädi Boletín Científico de Ciencias Básicas e Ingenierías del ICBI*, In Press, 2021, ISSN: 2007-6363, PP. 1-10, DOI: <https://doi.org/10.29057/icbi.v8i16.5713>
- RA2 M. Cruz-Pegueros, O.O. Gutiérrez-Frías, N.B. Lozada-Castillo, **A. Luviano-Juárez**, Modelado y control de un sistema de levitación magnética basado en un cojinete magnético activo, *Nova*

- RA3 H. Sira-Ramírez, A. Hernández-Méndez, J. Linares-Flores, **A. Luviano-Juárez**, Robust flat filtering DSP based control of the Boost Converter. *Control Theory and Technology*, 2016, Vol. 14 No. 3, ISSN: 2095-6983. PP. 224-236, <https://doi.org/10.1007/s11768-016-6025-6>
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Book Chapters

- BC1 M. Ramírez-Neria, **A. Luviano-Juárez**, N. Lozada-Castillo, G. Ochoa-Ortega, R. Madonski, Ch: Discrete-Time Active Disturbance Rejection Control: A Delta Operator Approach. In: *Advanced, Contemporary Control. Ser. Advances in Intelligent Systems and Computing*, Edited by A. Bartoszewicz, J. Kabziński, J. Kacprzyk, 2020, vol 1196, pp 1383-1395, Springer, Cham, <https://doi.org/10.1007/978-3-030-50936-1>, Print ISBN 978-3-030-50935-4 , Online ISBN 978-3-030-50936-1.
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International Conference Proceedings

- C1 M. Ramirez-Neria, **A. Luviano-Juárez**, N. Lozada-Castillo, G. Ochoa, H. Sira-Ramirez, Flat Filtering Cascade Control of Fourth Order Systems, IFAC World Conference 2020, *Accepted*
- C2 G. Hernandez, R.Q. Fuentes, A. Garcia-Gonzalez, **A. Luviano-Juárez**, Dynamic switched non-parametric identification of the human physiological response under virtual reality stimuli, IFAC World Conference 2020, *Accepted*
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National Conference Proceedings

- NC1 S.I. Palomino-Resendiz, D.A. Flores-Hernandez, **A. Luviano-Juarez**, N.B. Lozada-Castillo, O. Gutierrez-Frias, Focus control for a desalinador by solar distillation through artificial vision, IEEE Mexican Humanitarian Technology Conference (MHTC), March 2017, PP. 122-129. ISBN 978-1-5090-6450-2
- NC2 M. Ramirez-Neria, H. Sira-Ramirez, R. Garrido, **A. Luviano-Juarez**, Control Proporcional Integral Generalizado de un sistema ball and beam para tareas de seguimiento de trayectoria. Congreso de la Asociación Mexicana de Control Automático. 2015. PP 222-227.
- NC3 O.O. Gutiérrez Frías, **A. Luviano Juárez**, E. Rodríguez Hernández, Stabilization of the Two Wheels Inverted Pendulum by a Nested Saturation Function, Congreso Mexicano de Control Automatico AMCA 2012, Campeche, Mexico, PP. 212-217.
- NC4 **A. Luviano Juárez**, R. Martínez Guerra, Reconstrucción de fallas empleando observadores algebraicos, Congreso Mexicano de Control Automatico AMCA 2006, Mexico City, PP. 183-187.

Talks

- T1 Manipulación automática de sistemas robóticos y mecatrónicas: el rol de los sistemas de control embebido en aplicaciones tecnológicas, International Engineering Seminar, Sept. 2019, Casanare, Colombia.
- T2 La Mecatrónica en la vision del Instituto Politécnico Nacional, 1 Simposio de Mecatrónica en la UAM Lerma, October 2019, Estado de México, México.
- T3 Algunas relaciones entre sistemas telemáticos y mecatrónicos: Incidencias y oportunidades. Witcom, Nov. 2018, Mazatlán, Mexico.
- T4 Robustez en la implementación de sistemas robóticos, Universidad del Cauca, Colombia, August 2016.
- T5 Control de Sistemas robóticos. Universidad Politécnica de Uruapan, October 2015.
- T6 Control Automático en Sistemas Mecatrónicos: Motivación y Aplicaciones, 7 Congreso Nacional de Informática y Computación, Zihuatanejo Guerrero, November 2014.

- T7 Modelación adaptable de sistemas híbridos no lineales inciertos que representan reacciones secuenciales de tipo biológico y químico (Second part). Semana de la investigación. UPIITA – IPN, April 2014
- T8 Rechazo Activo de Perturbaciones Adaptable: Seminario permanente de investigación y desarrollo tecnológico, UPIITA – IPN, April 2014
- T9 Modelación adaptable de sistemas híbridos no lineales inciertos que representan reacciones secuenciales de tipo biológico y químico (First part). Semana de la investigación. UPIITA – IPN, May 2013
- T10 Estimación Algebraica en Sistemas Dinámicos. Seminario permanente de investigación y desarrollo tecnológico, UPIITA – IPN, September 2012
- T11 Algunos aspectos sobre Robótica: Presentado en el Congreso Nacional de Ciencia y Tecnología del Instituto Politécnico Nacional. Salamanca Guanajuato, September 2011.
- T12 Rechazo Activo de Perturbaciones en sistemas no lineales. Seminario permanente de investigación y desarrollo tecnológico, UPIITA – IPN, October 2011.
- T13 Métodos algebraicos de estimación y control para sistemas en tiempo discreto, Seminario departamental de la maestría en Tecnología Avanzada. April 2011.
- T14 Taller de Modelado y Simulación de Sistemas Biomecánicos, taller de Identificación de Sistemas Biomecánicos. Foro Internacional de Ingeniería Biomédica 2011. Tecnológico de Estudios Superiores de Monterrey Campus Guadalajara. April 2011.
- T15 Métodos algebraicos de estimación y control empleando técnicas discretas: Algunos casos de estudio. Universidad Autónoma de San Luis Potosí. Seminario del Posgrado en Ingeniería Eléctrica, September 2010.
- T16 Control automático y mecatrónica: Una introducción. Instituto Politécnico Nacional. Centro de Estudios Científicos y Tecnológicos 1 Gonzalo Vázquez Vela. June 2010.
- T17 Esquemas de control y visión artificial. Instituto Politécnico Nacional. Centro de Estudios Científicos y Tecnológicos 1 Gonzalo Vázquez Vela. May 2008.
- T18 Mini-máquina inyectora de plástico automatizada. Instituto Tecnológico Superior de Huetamo, October 2003.

Supervision

Doctoral Degree

- PhD1 Luis Ángel Castañeda Briones. Efecto de los retardos en el transporte de información para un sistema de tele-operación háptica basado en dos robots delta. Doctorado en Tecnología Avanzada, UPIITA-IPN January 2018.

- PhD2 Diego Alonso Flores Hernández. Design methodology for mechatronic systems:A functional approach. Doctorado en Ingeniería de Sistemas Robóticos y Mecatrónicos, UPIITA - IPN, September 2018.
- PhD3 Hugo Luis Serrano Molina. Dispositivo biomimético para rehabilitación de marcha y retroalimentación sensorial. Doctorado en Ingeniería de Sistemas Robóticos y Mecatrónicos, UPIITA - IPN, January 2019.
- PhD4 Yair Lozano Hernández. Sistema autónomo de suministro energético para vehículos aéreos no tripulados en ambientes de navegación abiertos. Doctorado en Ingeniería de Sistemas Robóticos y Mecatrónicos, UPIITA - IPN, August 2019.

Master Degree

- MD1 Luis Ángel Castañeda Briones. Esquema de control GPI adaptable para un robot manipulador paralelo. UPIITA IPN, December 2013.
- MD2 Agustín Uranga López. Control Proporcional Integral Generalizado para un sistema de robot bípedo con generación de trayectorias basada en interfaces cerebro-máquina. UPIITA IPN, April 2014.
- MD3 Hugo Luis Serrano Molina. Diseño y construcción de una prótesis de miembro inferior utilizando elementos activos y semi-activos. UPIITA-IPN, February 2015.
- MD4 David Cruz Ortiz. Diseño y construcción de un robot biomimético escalador. Maestría en Tecnología Avanzada, UPIITA – IPN, December 2015.
- MD5 Mario Alberto Leal Vargas. Object manipulation in dynamic environments based on cooperative robotic schemes, SEPI UPIITA, Maestría en Tecnología Avanzada. UPIITA-IPN, January 2016
- MD6 Mariana Felisa Ballesteros Escamilla. Sistema de captura de objetos utilizando un robot móvil tipo cuadrotor con un efector final acoplado. Maestría en Tecnología Avanzada. UPIITA-IPN, January 2016
- MD7 Gustavo Hernández Melgarejo. Sistema de rehabilitación de miembro inferior basado en esquemas de realidad aumentada. Maestría en Tecnología Avanzada, June 2016.
- MD8 José Eduardo Amaya Cruz. Reconstrucción de entornos tridimensionales mediante imágenes provenientes de un manipulador móvil. Maestría en Tecnología Avanzada, August 2016
- MD9 Laura Georgina Lira Vargas. Diseño de un controlador para el autoequilibrio de un robot bípedo. Maestría en Tecnología Avanzada, Oct. 2016.
- MD10 Sergio Isai Palomino Resendiz. Controlador en tareas de seguimiento de trayectoria para un desalinizador por destilación solar. Maestría en Tecnología Avanzada, January 2017
- MD11 Ricardo Alan Cortez Vega. Hyper-redundant manipulator for applications in endoscopy navigation, Maestría en Tecnología Avanzada, July 2017.
- MD12 Pamela Patricia Vera Tizatl, Sistema robótico de adquisición de imágenes nucleares. Maestría en Tecnología Avanzada, January 2018

- MD13 Karla Rincón Martínez, Diseño y construcción de un robot bípedo con extremidades de doble soporte. Maestría en Tecnología Avanzada, August 2018
- MD14 Daniel Eduardo Palacios López. Diseño de un asistente de pedaleo autónomo para bicicleta, Maestría en Tecnología Avanzada, January 2019.
- MD15 Marco Antonio Sandoval Chileno. Implementación de un sistema de locomoción eléctrico para un vehículo urbano. Maestría en Tecnología Avanzada, July 2019.
- MD16 Ingrith Yuritsa Páez Pidiache. Diseño y construcción de una prótesis de mano actuada por Aleaciones con Memoria de Forma (SMA). Maestría en Tecnología Avanzada, January 2020.

Bachelor Degree

- BD1 Jorge Enrique González Zapata, Desarrollo de una plataforma embebida para caracterización de motores, Communications and Electronics Eng., ESIME Zacatenco IPN
- BD2 Gabriel Antonio Martínez, Abel Hernández Hernández, Francisco Javier Hernández Morales, Cuauhtemoc Rámsses Román Meléndez, Simulador de ambiente de conducción automovilístico para niños, Mecatronics Eng. UPIITA IPN
- BD3 Tania Berenice Palacios Molina, Armando Rivas Rojas, Miriam Roxana Vázquez Flores, Estacionamiento vertical automatizado, Mecatronics Eng. UPIITA IPN
- BD4 Luis Antonio Bello Ramírez, Carlos Jonathan Hernández Méndez, Fernando Isaack Sánchez Lugo, Javier González Bonilla. Sistema Desalinizador de Agua. Mecatronics Eng. UPIITA IPN
- BD5 Daniel Hernández Vargas, Marlon Marín Castañeda, Mauricio Ponce de León González, Daniel Trinidad Rosales, Prototipo de robot móvil autónomo tipo ruedas caminantes, Mecatronics Eng.. UPIITA IPN
- BD6 Januaria Génesis Enciso Quezada, Ludwing Mauricio Reyes Franco, AMEISE: Prototipo de robot móvil capaz de dividirse en cuatro partes autónomas para la recolección y ordenamiento de objetos. Mecatronics Eng. UPIITA IPN
- BD7 Jonathan Miguel García Santos, Jorge Armando Mendez Chávez, Esteban Rodrigo Pérez Zárate, José Villanueva Casillas, Prototipo mecatrónico de exoesqueleto estático para asistir en el proceso de rehabilitación de las extremidades inferiores en niños mexicanos de 6 a 8 años, Mecatronics Eng. UPIITA IPN
- BD8 Juan Carlos Reyes Andrade, Israel Villagomez Pichardo, Rie María Teresita Takahashi Kusunose, Robot móvil teleoperado con accesorios intercambiables para la limpieza de sistemas de ductos de aire acondicionado. Mecatronics Eng. UPIITA IPN
- BD9 Juan Carlos Vásquez San Román, José Juan Armenta Segura, Magaly Velasco Soriano, Prototipo de Robot Bioinspirado en la Biometría del Vuelo de la Libélula. Mecatronics Eng. UPIITA IPN
- BD10 Javier Castillo Castañeda, Ricardo Alan Cortez Vega, Gabriel Cubas Perfecto, Diseño y construcción de un robot modular tipo serpiente, Bionics Eng. UPIITA IPN

- BD11 Zahira Isabel Islas Trejo, Héctor Ricardo Rivas Gutiérrez, Interfaz cerebro computadora no invasiva para el reconocimiento de potenciales evocados visuales, Bionics Eng. UPIITA IPN
- BD12 María Estela Altúzar Gallardo, Rodrigo Del Moral Díaz Rodrigo, Luis Antonio Ocegueda Pérez, Romina Ilean Sánchez Vega, Par de móviles transportadores de tubos mediante robótica cooperativa en un ambiente estructurado. Mechatronics Eng. UPIITA IPN
- BD13 Juan Carlos Torres Macías, Jorge Jovanny Vargas Muñoz, Robot Animatónico de Rostro Humano, Bionics Eng. UPIITA IPN
- BD14 Diego Martínez Cárdenas, Francisco Javier Tiscareño Alvarado. Trabajo: Estación semiautomática de lavado de piezas para bombas de agua por medio de un brazo transportador. Mechatronics Eng. UPIITA IPN
- BD15 César Ávila Rosas, Alberto Castañeda Sánchez, José Isaac Flores Delgado. Trabajo: Prototipo de un dispositivo de medición de desplazamientos laterales en estructuras hidráulicas. Mechatronics Eng. UPIITA IPN
- BD16 Karla Pérez Anaya, Javier De La O Ortiz, Desarrollo de un sistema de estimulación de miembro inferior para rehabilitación debida a accidentes de tipo Cerebro Vasculares. Bionics Eng. UPIITA-IPN
- BD17 Armando Isaac Cruz García, Óscar Hernández Cervantes, Tonatiuth Vélez Jiménez, Robot delta con 4 gdl para operaciones pick & place en banda transportadora, Mechatronics Eng. UPIITA IPN
- BD18 Juan Manuel Carrillo Moreno, Daniel Gasca García. Prototipo de dispositivo orientador para el aprovechamiento de la radiación solar. Mechatronics Eng. UPIITA IPN
- BD19 Jorge Alberto Ventura Flores, Diseño de una cortadora de EPP para la creación de perfiles alares. Mechatronics Eng. UPIITA IPN
- BD20 David Ayala Miramón. Sistema de Monitoreo Remoto Empleando Esquemas de Comunicación Inalámbrica. Communications and Electronics Eng. ESIME-Zacatenco-IPN
- BD21 Gerardo Montes Paredes, José Alberto Cisneros de Luna. Desarrollo de un algoritmos de Control GPI para una prótesis de tobillo. Biomedical Eng. UPIBI-IPN
- BD22 Carlos Raúl del Villar Santos, Diseño y construcción de un gripper experimental para instrumento quirúrgico de corte adaptado al Robot Mitsubishi® RV-M1. Mechatronics Eng. UPIITA IPN
- BD23 Mario Alberto Leal Vargas, Emmanuel Dorantes Malagón, Daniel Silva Contreras. Intercepción de objetos utilizando control por campos potenciales artificiales, Mechatronics Eng. UPIITA IPN
- BD24 Carina Ávila Tapia, Brenda Guadalupe Tenorio Hernández. Diseño y manufactura de Mecanismo de Whitworth integrando un control de velocidad por modos deslizantes con retroalimentación visual. Mechatronics Eng. UPIITA IPN
- BD25 Roberto Castellanos Vanegas, Pedro Adair Mendizábal Rojas, Ilze Velázquez Calzoncit, Análisis de sistemas de comunicación para robots móviles: Tecnologías RC y bluetooth. Communications end Electronics Eng. ESIME Zacatenco IPN

- BD26 Lizette Camargo Olvera, Luis Antonio Villalobos Moreno, Mónica Vuelvas Trinidad. Sistema de análisis de marcha. Communications and Electronics Eng. ESIME Zacatenco IPN
- BD27 Jersain Chávez López, Cinthya Beatriz San Juan Nava, Transmisor inalámbrico de señales biomédicas ECG y EMG. Communications and Electronics Eng. ESIME Zacatenco IPN
- BD28 David Sánchez López, Prototipo de Máquina Automatizada para el llenado y escarchado de un vaso. Communications and Electronics Eng. ESIME Zacatenco IPN
- BD29 Arturo Ambriz Carrillo, Alejandro Díaz Muñoz, Ricardo Mejía Rodríguez, Control cooperativo de dos brazos robóticos. Communications and Electronics Eng. ESIME Zacatenco IPN
- BD30 Jordan Exael Ángeles Pilloni, Fernando Pineda Fuentes. Control de fuerza para manipuladores. Communications and Electronics Eng. ESIME Zacatenco IPN

Funded Research

- FR1 SIP20201675. Control por Rechazo Activo de Perturbaciones adaptable para el seguimiento de trayectorias solares en sistemas robóticos. Principal Investigator.
- FR2 SIP20196058. Implementación de sistemas robóticos controlados por actuadores de memoria de forma. Principal Investigator.
- FR3 SIP20181665. Diseño e implementación de un sistema de teleoperación robótica para sistemas sujetos a retardos en tiempo. Principal Investigator.
- FR4 PN2016-2551. La sustentabilidad energética de fuentes intermitentes de energía, a través de su almacenamiento en baterías ion-Li", 2016 Conacyt, Proyectos de Desarrollo Científico para Atender Problemas Nacionales, Co-Investigador. 2018-2019.
- FR5 Red temática: "Modelado, Análisis, Diseño e Implementación de un Vehículo Eléctrico Mono-Plaza de Auto-balanceo de dos Ruedas de bajo Costo", Co- Investigator.
- FR6 SIP 20160354 - 20170487. Optimización de la producción de energía alternativa por fotoprocesos, Principal Investigator of the Module: Seguidor solar para la generación óptima de energía fotovoltaica y termoeléctrica. 2016-2017.
- FR7 SIP 20140373 - 20150279. Sistema autónomo de desalinización mediante destilación solar. Principal Investigator. 2014–2015.
- FR8 SIP 20120231 - 20130415. Modelación adaptable de sistemas híbridos no lineales inciertos que representan reacciones secuenciales de tipo biológico y químico. Principal Investigator. 2012–2013.
- FR9 Ciudad Sostenible 2011- Icyt D.F. Reciclado de residuos sólidos de aleaciones de aluminio mediante concentradores solares. 2012. Co-Investigador.

Journal and Conference Papers Reviewer

- American Control Conference
- Annual Reviews in Control
- Applied Energy
- Arabian Journal for Science and Engineering
- Asian Journal of Control
- Automatica
- Bioprocess and Biosystems Engineering
- Complexity
- Congreso Latinoamericano de Control Automático CLCA
- Congreso Nacional de Control Automático AMCA
- Control Engineering Practice
- Energy Conversion and Management
- Heliyon
- IEEE Conference on Decision and Control
- IEEE Robotics and Automation Letters (RA-L)
- IEEE Transactions on Automatic Control
- IEEE Transactions on Control Systems Technology
- IEEE Transactions on Industrial Electronics
- IEEE Transactions on Mechatronics
- IEEE Transactions on Neural Networks and Learning Systems
- IEEE Transactions on Systems, Man and Cybernetics
- IFAC Journal of Systems and Control
- IFAC Symposium on Nonlinear Control Systems
- IFAC World Congress
- Ingeniare. Revista chilena de ingeniería
- Ingeniería y Ciencia de la Universidad EAFIT, Medellín-Colombia
- International Conference on Electrical Engineering, Computing Science and Automatic Control
- International Journal of Aerospace Engineering
- International Journal of Control
- International Journal of Dynamics and Control
- International Journal of Electrical Power and Energy Systems
- International Journal of Robust and Nonlinear Control
- International Journal of Adaptive Control and Signal Processing
- Journal of Applied Mathematics and Computer Science (AMCS)
- Journal of the Franklin Institute
- Journal of Optimization Theory and Applications

- Kybernetica
- Mathematical Problems in Engineering
- Measurement
- Optimal Control, Applications and Methods
- Renewable Energy
- Revista de Ingeniería Electrónica, Automática y Comunicaciones
- Revista Dyna
- Sensors
- Shock and Vibration

Academic Distinctions

- Fifth Place. Annual Cansat Competition 2020 organized by the American Astronautical Society, Team Thor UPIITA. Faculty Advisor.
- Distinguished student at the baccalaureate level. 1995-1996. Instituto Politécnico Nacional.
- Distinguished student at the undergraduate level. 1999-2003. Instituto Politécnico Nacional.
- Encouragement of Investigators' Performance Scholar Level VIII (2020-2022)
- SIBE COFAA Scholar Level IV (2020-2022)

Other Activities

- Guest Editor. Complexity Journal (JCR Indexed). Special Issues:
 - 1) Theoretical and Applied Contributions to Robust Stability Analysis of Complex Systems , 2020.
 - 2) Open Challenges on the Stability of Complex Systems: Insights of Nonlinear Phenomena with or without Delay, 2020.
- Editorial Member, Boletín Científico Pádi, Universidad Autónoma del Estado de Hidalgo, 2018-Actual.
- Reviewer of Book proposals. Elsevier
- Chairman: Congreso Latinoamericano de Control Automático 2008. Session: Robotics I
- Co-Chair American Control Conference 2012. Session: Robotics
- Technical Council Member Instituto Politécnico Nacional - UPIITA
- Academic Coordinator of the Master in Advanced Tecnology Graduate Program – UPIITA IPN (2014–2015)
- Head of the Advanced Robotics Laboratory (September 2011 – At the present) UPIITA IPN

- Conacyt Certified reviewer
 - Engineering board member. Basic Science Grants 2014, 2015
 - Engineering board member. Proyectos para Solución Problemas Nacionales 2015
 - Evaluator (National Quality Graduate Programs)
 - Board Member (National Quality Graduate Programs, Master Degree in Advanced Technology, UPIITA IPN, 2014)
 - Board Member (National Quality Graduate Programs, Ph.D. in Advanced Technology, UPIITA IPN, 2016, 2019)
 - QS Academic Reviewer, 2019
 - Program Committee Member of CASE2020 (Argentine Symposium and Conference on Embedded Systems 2020).

Graduate Committee Membership

- CINVESTAV-IPN, Department of Electrical Engineering, Mexico City, Mexico
- CINVESTAV-IPN, Department of Automatic Control, Mexico City, Mexico
- Universidad Iberoamericana, Mexico City, Mexico
- Universidad Nacional de Colombia, Bogotá Colombia
- Universidad del Cauca, Popayán, Colombia