



## Intereses de la investigación

Teoría de control, Control adaptable, Servo sistemas, Sistemas caóticos

## Titulaciones

Doctorado, Doctor en Ciencias en la Especialidad de Control Automático  
Fecha de concesión: 1 sep. 2022

Maestría, Maestro en Ciencias en la Especialidad de Control Automático  
Fecha de concesión: 28 feb. 2018

Licenciatura, Ingeniero en Control y Automatización, Escuela Superior de Ingeniería Mecánica y Eléctrica (ESIME),  
Unidad Zacatenco  
Fecha de concesión: 18 feb. 2016

## Empleo

### Resultado de la investigación

#### **Identification of Linear Time-Invariant Systems: A Least Squares of Orthogonal Distances Approach**

Cantera-Cantera, L. A., Garrido, R., Luna, L., Vargas-Jarillo, C. & Asiain, E., mar. 2023, En: Mathematics. 11, 5, 1238.

#### **Anti-Chaos control of a servo system using nonlinear model reference adaptive control**

Asiain, E. & Garrido, R., feb. 2021, En: Chaos, Solitons and Fractals. 143, 110581.

#### Velocity trajectory tracking control: An Adaptive Ohnishi's Disturbance Observer approach

Luna, L., Asiain, E., Garrido, R. & Lopez, M., 11 nov. 2020, *2020 17th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2020*. Institute of Electrical and Electronics Engineers Inc., 9299120. (2020 17th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2020).

#### Servo velocity control using a P+ADOB controller

Luna, L., Asiain, E. & Garrido, R., 2020, En: IFAC-PapersOnLine. 53, 2, p. 1300-1305 6 p.

#### Servodrive chaotization: An MRAC approach using a nonlinear reference model

Asiain, E. & Garrido, R., sep. 2019, *2019 16th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2019*. Institute of Electrical and Electronics Engineers Inc., 8884540. (2019 16th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2019).

#### **Controller exploitation-exploration reinforcement learning architecture for computing near-optimal policies**

Asiain, E., Clempner, J. B. & Poznyak, A. S., 1 jun. 2019, En: Soft Computing. 23, 11, p. 3591-3604 14 p.

#### **A Reinforcement Learning Approach for Solving the Mean Variance Customer Portfolio in Partially Observable Models**

Asiain, E., Clempner, J. B. & Poznyak, A. S., 1 dic. 2018, En: International Journal on Artificial Intelligence Tools. 27, 8, 1850034.