

Maestría en Ciencias de la Ingeniería (MCI)

Publicaciones de alumnos y graduados con sus profesores

A julio de 2021

Nombres de alumnos o graduados están indicados en negritas.

- [1] Aguilar, A., Tuch, S., Bello, M., Reyes, J., & Ramirez, L. (2018). Interpretation and Emulation for Telegrams of the KNX Standard on MATLAB Simulink. *Proceedings - 2018 International Conference on Mechatronics, Electronics and Automotive Engineering, ICMEAE 2018*, 129–133.
- [2] **Álvarez-Trejo, A.**, Cuan-Urquizo, E., Roman-Flores, A., Trapaga-Martinez, L., & Alvarado-Orozco, J. (2021). Bézier-based metamaterials: Synthesis, mechanics and additive manufacturing. *Materials and Design*, 199, 109412.
- [3] **Andrés F. García-Calle**, Luis E. Garza-Castañón, Luis I. Minchala-Avila. (2021). Equidistributed search + Probability based tracking strategy to locate an air pollutant source with two UAVs. *IEEE Access (accepted)*
- [4] Aparicio-García, C., **Naula-Duchi, E.**, Garza-Castañón, L., Vargas-Martínez, A., Martínez-López, J., & Minchala-Ávila, L. (2020). Design, construction, and modeling of a BAUV with propulsion system based on a parallel mechanism for the caudal fin. *Applied Sciences (Switzerland)*, 10(7).
- [5] **Astudillo, G.**, Garza-Castanon, L., & Minchala Avila, L. (2020). Design and Evaluation of a Reliable Low-Cost Atmospheric Pollution Station in Urban Environment. *IEEE Access*, 8, 51129–51144.
- [6] Castilleja-Escobedo, O., **Sánchez-García, R.**, Nigam, K., & López-Salinas, J. (2020). Directional displacement of non-aqueous fluids through spontaneous aqueous imbibition in porous structures. *Chemical Engineering Science*, 228, 2021.
- [7] Cepeda-Zapata, L., Romero-Soto, F., Diaz De Leon, V., **Roa-Huertas, J.**, **Naal-Ruiz, N.**, Ibarra-Zarate, D., & Alonso-Valerdi, L. (2019). Implementation of a Virtual Reality rendered in Portable Devices for Strabismus Treatment based on Conventional Visual Therapy. *Proceedings of the Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBS*, 7189–7192.
- [8] **Curiel-Ramirez, L.**, **Izquierdo-Reyes, J.**, Bustamante-Bello, M., Ramirez-Mendoza, R., & Garcia-Barba, A. (2019). A simulation approach of the internet of intelligent vehicles for closed routes in urban environments. *2019 42nd International Conference on Telecommunications and Signal Processing, TSP 2019*, 672–680.

- [9] **Curiel-Ramirez, L., Izquierdo-Reyes, J., Bustamante-Bello, R., Ramirez-Mendoza, R., & De La Tejera, J.** (2018). Analysis and Approach of Semi-Autonomous Driving Architectures. *Proceedings - 2018 International Conference on Mechatronics, Electronics and Automotive Engineering, ICMEAE 2018*, 139–143.
- [10] **Curiel-Ramirez, L., Ramirez-Mendoza, R., Carrera, G., Izquierdo-Reyes, J., & Bustamante-Bello, M.** (2019). Towards of a modular framework for semi-autonomous driving assistance systems. *International Journal on Interactive Design and Manufacturing*, 13(1), 111–120.
- [11] **Curiel-Ramirez, L., Ramirez-Mendoza, R., Izquierdo-Reyes, J., Bustamante-Bello, M., & Navarro-Tuch, S.** (2019). Hardware in the loop framework proposal for a semi-autonomous car architecture in a closed route environment. *International Journal on Interactive Design and Manufacturing*, 13(4), 1647–1658.
- [12] **Curiel-Ramirez, L.A.; Ramirez-Mendoza, R.A.; Bautista-Montesano, R.; Bustamante-Bello, M.R.; Gonzalez-Hernandez, H.G.; Reyes-Avedaño, J.A.; Gallardo-Medina, E.C.** End-to-End Automated Guided Modular Vehicle. *Appl. Sci.* **2020**, *10*, 4400. <https://doi.org/10.3390/app10124400>
- [13] **Delgado-Licona, F., López-Guajardo, E., González-García, J., Nigam, K., & Montesinos-Castellanos, A.** (2020). Intensified tailoring of ZnO particles in a continuous flow reactor via hydrothermal synthesis. *Chemical Engineering Journal*, 396(May), 125281.
- [14] **Gaona, A., Chávez, J., & Vazquez, C.** (2021) RCPetri : a Matlab app for the synthesis of Petri net regulation controllers for industrial automation.
- [15] **Gaona, A., Chávez, J., Vázquez, C.** (2021). Experimental validation of regulation control for Petri nets in a small-scale manufacturing system.
- [16] **Garza-Arias, E., Rosas-Caro, J., Valdez-Resendiz, J., Mayo-Maldonado, J., Escobar-Valderrama, G., Loranca-Coutino, J., Villarreal-Hernandez, C., & Valdivia, L.** (2020). A Novel Boost Converter Topology with Non-Pulsating Input and Output Current. *ECCE 2020 - IEEE Energy Conversion Congress and Exposition*, 2, 4816–4821.
- [17] **Garza-Arias, E., Rosas-Caro, J., Valdez-Resendiz, J., Mayo-Maldonado, J., Escobar-Valderrama, G., Loranca-Coutino, J., Villarreal-Hernandez, C., & Valdivia, L.** (2020). A Novel Boost Converter Topology with Non-Pulsating Input and Output Current. *ECCE 2020 - IEEE Energy Conversion Congress and Exposition*, 4816–4821.
- [18] **Gonzalez Barreto, M., Huegel, J., Fuentes, R., & Perez, J.** (2020). Non-static object reconstruction system based on multiple RGB-D cameras.
- [19] **Gonzalez, V., & Castañeda, H.** (2019). Adaptive Sliding Formation Control Against Disturbances for a MAV Swarm.
- [20] **Gonzalez-Garcia, A., & Castañeda, H.** (2021). Guidance and Control Based on Adaptive Sliding Mode Strategy for a USV Subject to Uncertainties. *IEEE Journal of Oceanic Engineering*, 1–11.

- [21] González-García, J., **Narcizo-Nuci, N.**, García-Valdovinos, L., Salgado-Jiménez, T., Gómez-Espinosa, A., Cuan-Urquiza, E., & Cabello, J. (2021). Model-free high order sliding mode control with finite-time tracking for unmanned underwater vehicles. *Applied Sciences (Switzerland)*, *11(4)*, 1–22.
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- [24] **Izquierdo-Reyes, J.**, **Curiel-Ramirez, L.**, Ramirez-Mendoza, R., & Bustamante-Bello, M. (2017). A Logic Architecture for 360 ADAS-Alerts for Hazards Detection Based in Driver Actions. *MATEC Web of Conferences*, *124*, 1–6.
- [25] **Katt, C.**, & Castaneda, H. (2019). Containment control based on adaptive sliding mode for a MAV swarm system under perturbation. *2019 International Conference on Unmanned Aircraft Systems, ICUAS 2019*, 270–275.
- [26] **Katt, C.**, Castañeda, H., & Castillo, P. (2021). Formation-Containment for a MAV Fleet Under Perturbations via Adaptive Sliding Mode Approach, 1530–1537.
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- [33] **Martinez, E.M.;** Ponce, P.; Macias, I.; Molina, A. Automation Pyramid as Constructor for a Complete Digital Twin, Case Study: A Didactic Manufacturing System. *Sensors* **2021**, *21*, 4656. <https://doi.org/10.3390/s21144656>
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- [45] **Pacheco-Chérrez, J.**, Delgado-Gutiérrez, A., Cárdenas, D., & Probst, O. (2021). Reliable damage localization in cantilever beams using an image similarity assessment method applied to wavelet-enhanced modal analysis. *Mechanical Systems and Signal Processing*, 149.
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- [49] **Quintanilla, C.**, Crespo-Sánchez, S., Gómez-Espinosa, A., Roman-Flores, A., & Olvera-Silva, O. (2021). Elastic response of lattice arc structures fabricated using curved-layered fused deposition modeling. *Mechanics of Advanced Materials and Structures*, 28(14), 1498–1508.
- [50] **Quiroga-Novoa, P.**, Cuevas-Figueroa, G., Preciado, J., Floors, R., Peña, A., & Probst, O. (2021). Towards Better Wind Resource Modeling in Complex Terrain: A k-Nearest Neighbors Approach. *Energies*, 14(14).
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