

Marco Antonio Moreno Armendáriz
Researcher
Centro de Investigación en Computación (CIC)
Email: mam_armendariz@cic.ipn.mx, mam.armendariz@gmail.com
Phone: 56525
Web address: <http://www.deepdaemon.org>



Employment

Instituto Politecnico Nacional
Researcher
Centro de Investigación en Computación (CIC)
Mexico
1 Mar 2006 → present

Research outputs

IORand: A Procedural Videogame Level Generator Based on a Hybrid PCG Algorithm

Moreno-Armendáriz, M. A., Calvo, H., Torres-León, J. A. & Duchanoy, C. A., 1 Apr 2022, In: *Applied Sciences* (Switzerland). 12, 8, 3792.

Improving Depth Estimation by Embedding Semantic Segmentation: A Hybrid CNN Model

Valdez-Rodríguez, J. E., Calvo, H., Felipe-Riverón, E. & Moreno-Armendáriz, M. A., 1 Feb 2022, In: *Sensors*. 22, 4, 1669.

Deep-learning-based adaptive advertising with augmented reality

Moreno-Armendáriz, M. A., Calvo, H., Duchanoy, C. A., Lara-Cázares, A., Ramos-Díaz, E. & Morales-Flores, V. L., 1 Jan 2022, In: *Sensors*. 22, 1, 63.

Integrated surrogate optimization of a vertical axis wind turbine

Moreno-Armendáriz, M. A., Ibarra-Ontiveros, E., Calvo, H. & Duchanoy, C. A., 1 Jan 2022, In: *Energies*. 15, 1, 233.

Wind booster optimization for on-site energy generation using vertical-axis wind turbines

Moreno-Armendáriz, M. A., Duchanoy, C. A., Calvo, H., Ibarra-Ontiveros, E., Salcedo-Castañeda, J. S., Ayala-Canseco, M. & García, D., 2 Jul 2021, In: *Sensors*. 21, 14, 4775.

Asams: An adaptive sequential sampling and automatic model selection for artificial intelligence surrogate modeling

Duchanoy, C. A., Calvo, H. & Moreno-Armendáriz, M. A., 2 Sep 2020, In: *Sensors* (Switzerland). 20, 18, p. 1-26 26 p., 5332.

Career path level estimation and skill qualification feedback from textual descriptions

Duchanoy, C. A., Moreno-Armendáriz, M. A., Calvo, H. & Hernández-Ramos, V. E., 2020, In: *Journal of Intelligent and Fuzzy Systems*. 39, 2, p. 2497-2507 11 p.

Does Supervised Learning of Sentence Candidates Produce the Best Extractive Summaries?

Gutiérrez Hinojosa, S. J., Calvo, H., Moreno-Armendáriz, M. A. & Duchanoy, C., 2020, *Advances in Computational Intelligence - 19th Mexican International Conference on Artificial Intelligence, MICAI 2020, Proceedings*. Martínez-Villaseñor, L., Ponce, H., Herrera-Alcántara, O. & Castro-Espinoza, F. A. (eds.). Springer Science and Business Media Deutschland GmbH, p. 293-296 4 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 12469 LNAI).

Estimation of Personality Traits from Portrait Pictures Using the Five-Factor Model

Moreno-Armendariz, M. A., Duchanoy Martinez, C. A., Calvo, H. & Moreno-Sotelo, M., 2020, In: *IEEE Access*. 8, p. 201649-201665 17 p., 9244051.

Psychological attachment style prediction based on short biographies

Calvo, H., Gutiérrez-Hinojosa, S. J., Rocha-Ramírez, A. P. & Moreno-Armendáriz, M. A., 2020, In: Journal of Intelligent and Fuzzy Systems. 39, 2, p. 2189-2199 11 p.

An Analytical Hierarchy Process to manage water quality in white fish (*Chirostoma estor estor*) intensive culture

Vázquez-Burgos, J. L., Carballo-Hernández, J. J., Sánchez-Fernández, L. P., Moreno-Armendáriz, M. A., Tello-Ballinas, J. A. & Hernández-Bautista, I., Dec 2019, In: Computers and Electronics in Agriculture. 167, 105071.

Deep green diagnostics: Urban green space analysis using deep learning and drone images

Moreno-Armendáriz, M. A., Calvo, H., Duchanoy, C. A., López-Juárez, A. P., Vargas-Monroy, I. A. & Suárez-Castañón, M. S., 30 Nov 2019, In: Sensors (Basel, Switzerland). 19, 23, 5287.

DIS-C: conceptual distance in ontologies, a graph-based approach

Quintero, R., Torres-Ruiz, M., Menchaca-Mendez, R., Moreno-Armendariz, M. A., Guzman, G. & Moreno-Ibarra, M., 4 Apr 2019, In: Knowledge and Information Systems. 59, 1, p. 33-65 33 p.

A deep neural network based model for a kind of magnetorheological dampers

Duchanoy, C. A., Moreno-Armendáriz, M. A., Moreno-Torres, J. C. & Cruz-Villar, C. A., 2 Mar 2019, In: Sensors (Switzerland). 19, 6, 1333.

Central embeddings for extractive summarization based on similarity

Gutiérrez-Hinojosa, S. J., Calvo, H. & Moreno-Armendáriz, M. A., 2019, In: Computacion y Sistemas. 23, 3, p. 649-663 15 p.

Toward Universal Word Sense Disambiguation Using Deep Neural Networks

Calvo, H., Rocha-Ramírez, A. P., Moreno-Armendariz, M. A. & Duchanoy, C. A., 2019, In: IEEE Access. 7, p. 60264-60275 12 p., 8706934.

Concurrent optimization on the powertrain of robot manipulators for optimal motor selection and control in a point-to-point trajectory planning

Padilla-García, E. A., Cruz-Villar, C. A., Rodriguez-Angeles, A. & Moreno-Armendáriz, M. A., 1 Dec 2017, In: Advances in Mechanical Engineering. 9, 12

A novel recurrent neural network soft sensor via a differential evolution training algorithm for the tire contact patch

Duchanoy, C. A., Moreno-Armendáriz, M. A., Urbina, L., Cruz-Villar, C. A., Calvo, H. & de, J., 26 Apr 2017, In: Neurocomputing. 235, p. 71-82 12 p.

Forecasting, clustering and patrolling criminal activities

Calvo, H., Godoy-Calderón, S., Moreno-Armendáriz, M. A. & Martínez-Hernández, V. M., 2017, In: Intelligent Data Analysis. 21, 3, p. 697-720 24 p.

Integrated concept blending with vector space models

Calvo, H., Méndez, O. & Moreno-Armendáriz, M. A., Nov 2016, In: Computer Speech and Language. 40, p. 79-96 18 p.

Optimal redesign of a shock absorber using physical variables and the full dynamics of the suspension system

Duchanoy, C. A., Moreno-Armendáriz, M. A. & Cruz-Villar, C. A., 2 Apr 2016, In: Mechanics Based Design of Structures and Machines. 44, 1-2, p. 32-42 11 p.

Advances in Neural Networks and Hybrid-Metaheuristics: Theory, Algorithms, and Novel Engineering Applications

Moreno-Armendáriz, M. A., Hagan, M., Alba, E., Rubio, J. D. J., Cruz-Villar, C. A. & Leguizamón, G., 2016, In: Computational Intelligence and Neuroscience. 2016, 3263612.

A practical framework for automatic food products classification using computer vision and inductive characterization
Calvo, H., Moreno-Armendáriz, M. A. & Godoy-Calderón, S., 2016, In: Neurocomputing. 175, p. 911-923 13 p.

A novel tire contact patch soft sensor via Neural Networks

Urbina, L., Duchanoy, C. A., Faustino-González, G., Moreno-Armendáriz, M. A., Cruz-Villar, C. A. & Calvo, H., 14 Dec 2015, *2015 12th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2015*. Institute of Electrical and Electronics Engineers Inc., 7357974. (2015 12th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2015).

Master-slave synchronization for a chaotic system by means of I&I observer

Aguilar-Ibanez, C., Martínez Guerra, R., Pérez Pinacho, C., Suárez-Castanón, M., Moreno-Armendariz, M. & Mendoza-Mendoza, J., 14 Dec 2015, *2015 12th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2015*. Institute of Electrical and Electronics Engineers Inc., 7357919. (2015 12th International Conference on Electrical Engineering, Computing Science and Automatic Control, CCE 2015).

Corrigendum to "Analyzing the spatial dynamics of a prey-predator lattice model with social behavior" [Ecol. Compl. 22 (2015) 192-202]

Molina, M. M., Moreno-Armendáriz, M. A. & Mora, J. C. S. T., 1 Dec 2015, In: Ecological Complexity. 24, p. 82 1 p.

Experimental vision regulation of a quadrotor

Rubio, J. D. J., Zamudio, Z., Meda, J. A. & Moreno, M. A., Aug 2015, In: IEEE Latin America Transactions. 13, 8, p. 2514-2523 10 p., 7331906.

Analyzing the spatial dynamics of a prey-predator lattice model with social behavior

Molina, M. M., Moreno-Armendáriz, M. A. & Carlos Seck Tuoh Mora, J., 1 Jun 2015, In: Ecological Complexity. 22, p. 192-202 11 p.

Nonlinear full-car model for optimal dynamic design of an automotive damper

Duchanoy, C. A., Cruz-Villar, C. A. & Moreno-Armendáriz, M. A., 2015, *Multibody Mechatronic Systems - Proceedings of the MUSME Conference, 2014*. Martinez, E. E. H. & Ceccarelli, M. (eds.). Kluwer Academic Publishers, p. 489-500 12 p. (Mechanisms and Machine Science; vol. 25).

Patrolling routes optimization using ant colonies

Calvo, H., Godoy-Calderon, S., Moreno-Armendáriz, M. A. & Martínez-Hernández, V. M., 2015, *Pattern Recognition-7th Mexican Conference, MCPR 2015, Proceedings*. Olvera López, J. A., Carrasco-Ochoa, J. A., Martínez-Trinidad, J. F., Famili, F. & Sossa-Azuela, J. H. (eds.). Springer Verlag, p. 302-312 11 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 9116).

Dual PD control regulation with nonlinear compensation for a ball and plate system

Galvan-Colmenares, S., Moreno-Armendáriz, M. A., Rubio, J. D. J., Ortíz-Rodríguez, F., Yu, W. & Aguilar-Ibáñez, C. F., 2014, In: Mathematical Problems in Engineering. 2014, 894209.

Visual SLAM and Obstacle Avoidance in Real Time for Mobile Robots Navigation

Moreno-Armendáriz, M. A. & Calvo, H., 2014, *Proceedings - 2014 IEEE International Conference on Mechatronics, Electronics, and Automotive Engineering, ICMEAE 2014*. Institute of Electrical and Electronics Engineers Inc., p. 44-49 6 p. 7120844. (Proceedings - 2014 IEEE International Conference on Mechatronics, Electronics, and Automotive Engineering, ICMEAE 2014).

On the spatial dynamics and oscillatory behavior of a predator-prey model based on cellular automata and local particle swarm optimization

Molina, M. M., Moreno-Armendáriz, M. A. & Carlos Seck Tuoh Mora, J., 7 Nov 2013, In: Journal of Theoretical Biology. 336, p. 173-184 12 p.

Hardware implementation of the elitist compact Genetic Algorithm using Cellular Automata pseudo-random number generator

Moreno-Armendáriz, M. A., Cruz-Cortés, N., Duchanoy, C. A., León-Javier, A. & Quintero, R., May 2013, In: Computers and Electrical Engineering. 39, 4, p. 1367-1379 13 p.

A reverse dictionary based on semantic analysis using wordnet

Meñdez, O., Calvo, H. & Moreno-Armendáriz, M. A., 2013, *Advances in Artificial Intelligence and Its Applications - 12th Mexican International Conference on Artificial Intelligence, MICAI 2013, Proceedings*. PART 1 ed. p. 275-285 11 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 8265 LNAI, no. PART 1).

Assessing the quality level of corn tortillas with inductive characterization and digital image analysis

Moreno-Armendáriz, M. A., Godoy-Calderon, S., Calvo, H. & Rojas-Padilla, O. M., 2013, *Pattern Recognition - 5th Mexican Conference, MCPR 2013, Proceedings*. p. 40-53 14 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 7914 LNCS).

Design of a damper for a suspension system via evolutive optimization

Duchanoy, C. A., Moreno-Armendáriz, M. A. & Cruz-Villar, C. A., 2013, *Systems and Design*. American Society of Mechanical Engineers (ASME), (ASME International Mechanical Engineering Congress and Exposition, Proceedings (IMECE); vol. 12).

Hierarchical fuzzy CMAC control for nonlinear systems

Rodríguez, F. O., de Jesús Rubio, J., Gaspar, C. R. M., Tovar, J. C. & Armendáriz, M. A. M., 2013, In: *Neural Computing and Applications*. 23, SUPPL1, p. 323-331 9 p.

The trajectory tracking problem for an unmanned four-rotor system: Flatness-based approach

Aguilar-Ibáñez, C., Sira-Ramírez, H., Suárez-Castañón, M. S., Martínez-Navarro, E. & Moreno-Armendariz, M. A., 1 Jan 2012, In: *International Journal of Control*. 85, 1, p. 69-77 9 p.

FPGA implementation of a pitch and roll soft sensors for active suspension system

Moreno-Armendáriz, M. A., Duchanoy, C. A., Flores-Velázquez, S. & Cruz-Villar, C. A., 2012, *Proceedings of the IASTED International Conference on Signal and Image Processing, SIP 2012*. p. 99-106 8 p. (Proceedings of the IASTED International Conference on Signal and Image Processing, SIP 2012).

Modeling and control in task-space of a mobile manipulator with cancellation of factory-installed proportional - Derivative control

Salazar-Silva, G. H., Moreno-Armendáriz, M. A. & Gallegos, J. Á., 2012, In: *Computacion y Sistemas*. 16, 4, p. 409-419 11 p.

Modeling and nonlinear PD regulation for ball and plate system

Colmenares, S. G., Moreno-Armendariz, M. A., Yu, W. & Ortiz Rodriguez, F., 2012, *2012 World Automation Congress, WAC 2012*. 6320924. (World Automation Congress Proceedings).

Prey - Predator dynamics and swarm intelligence on a cellular automata model

Martínez Molina, M., Moreno-Armendáriz, M. A., Cruz-Cortés, N. & Mora, J. C. S. T., 2012, In: *Applied and Computational Mathematics*. 11, 2, p. 243-256 14 p.

Stable adaptive compensation with fuzzy CMAC for an overhead crane

Yu, W., Moreno-Armendariz, M. A. & Rodriguez, F. O., 1 Nov 2011, In: *Information Sciences*. 181, 21, p. 4895-4907 13 p.

Image Processing Applied to Classification of Avocado Variety Hass (*Persea americana* Mill.) During the Ripening Process

Arzate-Vázquez, I., Chanona-Pérez, J. J., de Perea-Flores, M. J., Calderón-Domínguez, G., Moreno-Armendáriz, M. A., Calvo, H., Godoy-Calderón, S., Quevedo, R. & Gutiérrez-López, G., Oct 2011, In: *Food and Bioprocess Technology*. 4, 7, p. 1307-1313 7 p.

Embedded visual SLAM for navigation of an autonomous vehicle

Moreno-Armendariz, M. A., Duchanoy, C. A., Zanatta-Júarez, A. A. G. & Cruz-Villar, C. A., 2011, *Proceedings of the 2nd IASTED International Conference on Robotics, Robo 2011*. p. 211-218 8 p. (Proceedings of the 2nd IASTED International Conference on Robotics, Robo 2011).

Modeling and control of a mobile manipulator with cancellation of factory-installed regulator

Salazar-Silva, G. H., Moreno-Armendáriz, M. A. & Gallegos, J. Á., 2011, *Proceedings of the 2nd IASTED International Conference on Robotics, Robo 2011*. p. 353-360 8 p. (Proceedings of the 2nd IASTED International Conference on Robotics, Robo 2011).

Modeling prey-predator dynamics via particle swarm optimization and cellular automata

Martínez-Molina, M., Moreno-Armendáriz, M. A., Cruz-Cortés, N. & Seck Tuoh Mora, J. C., 2011, *Advances in Soft Computing - 10th Mexican International Conference on Artificial Intelligence, MICAI 2011, Proceedings*. PART 2 ed. p. 189-200 12 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 7095 LNAI, no. PART 2).

Neural PD control with second-order sliding mode compensation for robot manipulators

Hernandez, D., Yu, W. & Moreno-Armendariz, M. A., 2011, *2011 International Joint Conference on Neural Networks, IJCNN 2011 - Final Program*. p. 2395-2402 8 p. 6033529. (Proceedings of the International Joint Conference on Neural Networks).

Wheeled mobile manipulator modeling for task space control

Salazar-Silva, G. H., Gallegos, J. Á. & Moreno-Armendáriz, M. A., 2011, *ICINCO 2011 - Proceedings of the 8th International Conference on Informatics in Control, Automation and Robotics*. p. 313-316 4 p. (ICINCO 2011 - Proceedings of the 8th International Conference on Informatics in Control, Automation and Robotics; vol. 2).

Indirect hierarchical FCMAC control for the ball and plate system

Moreno-Armendáriz, M. A., Pérez-Olvera, C. A., Rodríguez, F. O. & Rubio, E., Aug 2010, In: *Neurocomputing*. 73, 13-15, p. 2454-2463 10 p.

The CR- ω + classification algorithm for spatio-temporal prediction of criminal activity

Godoy-Calderón, S., Calvo, H., Martínez-Hernández, V. M. & Moreno-Armendáriz, M. A., Apr 2010, In: *Journal of Applied Research and Technology*. 8, 1, p. 5-25 21 p.

A novel hardware implementation of the compact Genetic Algorithm

Moreno-Armendáriz, M. A., Cruz-Cortés, N. & León-Javier, A., 2010, *Proceedings - 2010 International Conference on Reconfigurable Computing and FPGAs, ReConFig 2010*. p. 156-161 6 p. 5695298. (Proceedings - 2010 International Conference on Reconfigurable Computing and FPGAs, ReConFig 2010).

Design and implementation of a visual fuzzy control in FPGA for the ball and plate system

Moreno-Armendáriz, M. A., Rubio, E. & Pérez-Olvera, C. A., 2010, *Proceedings - 2010 International Conference on Reconfigurable Computing and FPGAs, ReConFig 2010*. p. 85-90 6 p. 5695286. (Proceedings - 2010 International Conference on Reconfigurable Computing and FPGAs, ReConFig 2010).

A new fuzzy visual servoing with application to robot manipulator

Moreno-Armendariz, M. A. & Yu, W., 2009, In: *International Journal of Advanced Mechatronic Systems*. 1, 3, p. 157-167 11 p.

Designing a compact Genetic Algorithm with minimal FPGA resources

León-Javier, A., Moreno-Armendáriz, M. A. & Cruz-Cortés, N., 2009, *Advances in Computational Intelligence*. Springer Verlag, p. 349-357 9 p. (Advances in Intelligent and Soft Computing; vol. 61 AISC).

Finding minimal addition chains with a particle swarm optimization algorithm

León-Javier, A., Cruz-Cortés, N., Moreno-Armendáriz, M. A. & Orantes-Jiménez, S., 2009, *MICAI 2009: Advances in Artificial Intelligence - 8th Mexican International Conference on Artificial Intelligence, Proceedings*. p. 680-691 12 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 5845 LNAI).

Image processing applied to classification of avocado variety hass (*Persea Americana Mill*) during their ripening process
Arzate, I., De Perea, M. J., Moreno-Armendáriz, M. A., Calvo, H., Godoy-Calderón, S., Gutiérrez, G. F., Calderón, G. & Chanona, J. J., 2009, p. 683-689. 7 p.

Realizing general MLP networks with minimal FPGA resources

Latino, C., Moreno-Armendáriz, M. A. & Hagan, M., 2009, *2009 International Joint Conference on Neural Networks, IJCNN 2009*. p. 1722-1729 8 p. 5178680. (Proceedings of the International Joint Conference on Neural Networks).

Adaptive hierarchical fuzzy CMAC controller with stable learning algorithm for unknown nonlinear systems

Ortiz, F., Yu, W. & Moreno-Armendariz, M., 24 Dec 2008, p. 294-304. 263 p.

Optimized Cellular Neural Network Universal Machine emulation on FPGA

Pazienza, G. E., Bellana-Camañes, J., Riera-Baburés, J., Vilasís-Cardona, X., Moreno-Armendáriz, M. A. & Balsi, M., 25 Aug 2008, p. 815-818. 733 p.

Nonlinear systems identification via two types of recurrent fuzzy CMAC

Rodríguez, F. O., Yu, W. & Moreno-Armendariz, M. A., Aug 2008, In: *Neural Processing Letters*. 28, 1, p. 49-62 14 p.

Anti-swing control with hierarchical fuzzy CMAC compensation for an overhead crane

Rodríguez, F. O., Yu, W. & Moreno-Armendariz, M. A., 31 Mar 2008, p. 333-338. 299 p.

Hierarchical fuzzy CMAC for nonlinear systems modeling

Yu, W., Rodríguez, F. O. & Moreno-Armendariz, M. A., 2008, In: *IEEE Transactions on Fuzzy Systems*. 16, 5, p. 1302-1314 13 p.

Adaptive hierarchical fuzzy CMAC controller with stable learning algorithm for unknown nonlinear systems

Ortiz, F., Yu, W. & Moreno-Armendariz, M., 2007, *Proceedings - 2007 6th Mexican International Conference on Artificial Intelligence, Special Session, MICAI 2007*. IEEE Computer Society, p. 294-304 11 p. 4659319. (Proceedings - 2007 6th Mexican International Conference on Artificial Intelligence, Special Session, MICAI 2007).

Anti-swing control with hierarchical fuzzy CMAC compensation for an overhead crane

Rodríguez, F. O., Yu, W. & Moreno-Armendariz, M. A., 2007, *22nd IEEE International Symposium on Intelligent Control, ISIC 2007. Part of IEEE Multi-conference on Systems and Control*. IEEE Computer Society, p. 333-338 6 p. 4450907. (22nd IEEE International Symposium on Intelligent Control, ISIC 2007. Part of IEEE Multi-conference on Systems and Control).

Nonlinear systems identification via two types of recurrent fuzzy CMAC

Rodríguez, F. O., Yu, W. & Moreno-Armendariz, M. A., 2007, *The 2007 International Joint Conference on Neural Networks, IJCNN 2007 Conference Proceedings*. p. 823-828 6 p. 4371064. (IEEE International Conference on Neural Networks - Conference Proceedings).

Optimized Cellular Neural Network Universal Machine emulation on FPGA

Pazienza, G. E., Bellana-Camañes, J., Riera-Baburés, J., Vilasís-Cardona, X., Moreno-Armendáriz, M. A. & Balsi, M., 2007, *European Conference on Circuit Theory and Design 2007, ECCTD 2007*. IEEE Computer Society, p. 815-818 4 p. 4529721. (European Conference on Circuit Theory and Design 2007, ECCTD 2007).

Recurrent fuzzy CMAC for nonlinear system modeling

Ortiz, F., Yu, W., Moreno-Armendariz, M. & Li, X., 2007, *Advances in Neural Networks - ISNN 2007 - 4th International Symposium on Neural Networks, ISNN 2007, Proceedings*. PART 1 ed. Springer Verlag, p. 487-495 9 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 4491 LNCS, no. PART 1).

Recurrent fuzzy CMAC in hierarchical form for dynamic system identification

Rodríguez, F. O., Yu, W. & Moreno-Armendariz, M. A., 2007, *Proceedings of the 2007 American Control Conference, ACC*. p. 5706-5711 6 p. 4282705. (Proceedings of the American Control Conference).

System identification using hierarchical fuzzy neural networks with stable learning algorithm

Yu, W., Moreno-Armendariz, M. A. & Rodriguez, F. O., 2007, In: *Journal of Intelligent and Fuzzy Systems*. 18, 2, p. 171-183 13 p.

System identification using hierarchical fuzzy CMAC neural networks

Rodriguez, F. O., Yu, W. & Moreno-Armendariz, M. A., 2006, *Computational Intelligence International Conference on Intelligent Computing, ICIC 2006, Proceedings*. Springer Verlag, p. 230-235 6 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 4114 LNAI - II).

Training cellular neural networks with stable learning algorithm

Moreno-Armendariz, M. A., Pazienza, G. E. & Yu, W., 2006, *Advances in Neural Networks - ISNN 2006: Third International Symposium on Neural Networks, ISNN 2006, Proceedings*. Springer Verlag, p. 558-563 6 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 3971 LNCS).

Robust visual servoing of robot manipulators with neuro compensation

Yu, W. & Moreno-Armendariz, M. A., Nov 2005, In: *Journal of the Franklin Institute*. 342, 7, p. 824-838 15 p.

A new fuzzy visual servoing with application to robot manipulator

Moreno-Armendariz, M. A. & Yu, W., 2005, In: *Proceedings of the American Control Conference*. 5, p. 3688-3693 6 p.

Real time computer vision by means of CNNs on FPGAs

López-García, J. C., Moreno-Armendáriz, M. A., Riera-Baburés, J., Balsi, M. & Vilás-Cardona, X., 2005, *2nd International Conference on Cybernetics and Information Technologies, Systems and Applications, CITSA 2005, 11th International Conference on Information Systems Analysis and Synthesis, ISAS 2005*. International Institute of Informatics and Systemics, IIIS, p. 98-102 5 p. (2nd International Conference on Cybernetics and Information Technologies, Systems and Applications, CITSA 2005, 11th International Conference on Information Systems Analysis and Synthesis, ISAS 2005; vol. 1).

Real time vision by FPGA implemented CNNs

López-García, J. C., Moreno-Armendáriz, M. A., Riera-Baburés, J., Balsi, M. & Vilás-Cardona, X., 2005, *Proceedings of the 2005 European Conference on Circuit Theory and Design*. p. 281-284 4 p. 1522965. (Proceedings of the 2005 European Conference on Circuit Theory and Design; vol. 1).

System identification using hierarchical fuzzy neural networks with stable learning algorithms

Yu, W. & Moreno-Armendariz, M. A., 2005, *Proceedings of the 44th IEEE Conference on Decision and Control, and the European Control Conference, CDC-ECC '05*. p. 4089-4094 6 p. 1582802. (Proceedings of the 44th IEEE Conference on Decision and Control, and the European Control Conference, CDC-ECC '05; vol. 2005).

2-D Visual servoing with velocity estimation

Moreno-Armendariz, M. A., Yu, W., Pozniak, A. S. & Gómez-Ramírez, E., 2004, In: *Proceedings of the IASTED International Conference on Modelling, Identification and Control*. 23, p. 605-610 6 p., 412-238.

Modelling of gasoline blending via discrete-time neural networks

Yu, W., Moreno-Armendariz, M. A. & Gómez-Ramírez, E., 2004, *2004 IEEE International Joint Conference on Neural Networks - Proceedings*. p. 1291-1296 6 p. (IEEE International Conference on Neural Networks - Conference Proceedings; vol. 2).

An optical stereo vision model

Moreno-Armendariz, M. A., Aguilar-Luna, J., Gómez-Ramírez, E. & Vilasis-Cardona, X., 2003, *Proceedings of the IASTED International Conference on Circuits, Signals, and Systems*. Rashid, M. H. & Rashid, M. H. (eds.). p. 134-139 6 p. (Proceedings of the IASTED International Conference on Circuits, Signals, and Systems).

Stable 3-D visual servoing: An experimental comparison
Moreno, M. A., Yu, W. & Poznyak, A., 2001, p. 218-223. 6 p.

Observer-based neuro identifier
Yu, W., Moreno, M. A. & Li, X., 2000, In: IEE Proceedings: Control Theory and Applications. 147, 2, p. 145-152 8 p.