M. J. YAZDANPANAH

Director, Control & Intelligent Processing Center of Excellence (CIPCE)

Director, Advanced Control Systems Lab (ACSL) School of Electrical and Computer Engineering

University College of Engineering, University of Tehran

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Objective

C.V. submission

Current Position

Professor *July 8, 2008-Present*

School of ECE, University of Tehran, Tehran, Iran

Courses Taught/To be-Taught

Taught at the Sch. of ECE, U. of Tehran Nonlinear Control Systems I (Analysis & Design)

Taught at the Sch. of ECE, U. of Tehran Nonlinear Control Systems II (Analysis & Design)

Taught at the Sch. of ECE, U. of Tehran Optimal Control (Including materials on System Optimization & LQG-LTR)

Taught at the Sch. of ECE, U. of Tehran Adaptive Control Systems

Taught at the Sch. of ECE,U. of Tehran Robust Control (State-Space & Frequency Domain)

Taught at the Sch. of ECE, U. of Tehran Neural Networks and Applications

Taught at the Sch. of ECE, U. of Tehran Linear and Nonlinear Programming

Taught at the Sch. of ECE, U. of Tehran Linear Control Systems

Taught at the Sch. of ECE, U. of Tehran Linear Algebra

Taught at the ERC, Tehran, Iran Digital Control Systems

To be taught at the Sch. of ECE Linear Systems

To be taught at the Sch. of ECE Linear Matrix Inequalities in Control Systems

Membership

- Control & Intelligent Processing Center of Excellence, Tehran, Iran
- IEEE Control Systems Society
- IEEE Computational Intelligence Society
- Iranian Mechatronics Association
- Intelligent Systems Scientific Society of Iran

Research Grants

- · University of Tehran
- · Ministry of Energy
- · Automotive industries
- Iranian Fuel Conservation Organization
- · Management and Planning Organization
- SAPCO

Research Activities/Interests

Supervision of 6, and co-supervision of 5 Ph.D. students plus supervision of 45 M.Sc. students in the following areas:

Theoretical Research Topics

- Control of slowly varying systems
- Practical nonlinear output regulation
- · Robust control of singularly perturbed systems
- Techniques for the enhancement of sliding mode controllers
- · Control of multivariable nonlinear systems using nested sliding mode technique
- Robustness analysis of nonlinear control systems
- Optimization Approach for Computing Nonlinear Sliding Surfaces
- New results on Input/State Stability (ISS)
- · Enlarging domain of attraction in nonlinear control systems
- · Order reduction using analytical and intelligent techniques
- Reconfigurable controller design
- Optimal Takagi-Sugeno fuzzy control
- Robust control of singularly perturbed systems
- Computation of nonlinear H_{∞} controllers via analytical and intelligent techniques
- Mixed H_2/H_∞ estimation/control
- · Adaptive sliding control of non-minimum phase systems
- · Feedback linearization using neural networks
- · Robust control of time delay systems
- · Fault detection

Applied Research Topics

- Multiscale modeling of cancer chemotherapy
- · Control on networks
- · Drug delivery control in cardiac arrhythmia
- Tracking control of mobile robots
- Control of redundant manipulators
- Analytical and intelligent techniques for control of induction motors
- · Study of reservoir sedimentation using expert systems
- Neural network application to water level forecasting
- Control of flexible link/joint manipulators
- Control of automotive systems using analytical and intelligent techniques
- Analytical and intelligent methods in the control of HVAC systems
- · Nonlinear power systems stabilizer

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- · Nonlinear control synthesis for a helicopter
- Multi-sensor tracking
- Image compression via neural networks
- · Forecasting daily urban water demand
- Forecasting Stock Price Direction Using a Neura Network Predictor
- Prediction of synthetic mercury injection capillary pressure curve using ANN
- Training of an attacker in robot soccer competitions based on the Cohonen NN
- · Adaptive force control of redundant manipulators
- Modeling and control of washing machines (analytical and intelligent techniques)
- · Gain-schedeuled PI controller for synchronous generator

Education

Ph.D., Electrical Engineering

Concordia University, Montreal, Quebec, Canada

1997 Rank: Outstanding

Thesis: Control of flexible-link manipulators using nonlinear H_{∞} techniques

M.Sc., Electrical Engineering

1988

University of Tehran, Tehran, Iran

Thesis: a. Transient stability of power systems

b. Study of bifurcation phenomenon in dynamical systems

B.Sc., Electrical Engineering

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Isfahan University of Technology, Isfahan, Iran

Experience

Director of CIPCE

June 2010-Present

Control & Intelligent Processing Center of Excellence, University of Tehran, Tehran,

Iran

Associate Professor

October 19, 2002-July 8, 2008

School of ECE, University of Tehran, Tehran, Iran

Assistant Professor

June 22, 1998- Oct. 18, 2002

School of ECE, University of Tehran, Tehran, Iran

Director of Control Group

Sep. 2001-Oct. 2004

School of ECE, University of Tehran, Tehran, Iran

Director of Automation Dept.

Saadqe Negaar Development of Information Industries Co., Tehran, Iran

Aug. 1998-Aug. 1999 (Part Time)

Concordia University, Montreal, Quebec, Canada

Post Doctoral Fellow June 1997-March 1998

Chairman of the System Design

Engineering Research Center, Tehran, Iran

Division

May 1989-December 1992

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R&D Engineer March 1988-April 1989 Engineering Research Center, Tehran, Iran

Certificate

A Course in Analog Computer **Training** Dornier Company, Germany

Jan.-Feb. 1989

Awards & Scholarships

Scholarship 1990 For scoring top 10% in the Ph.D. exam, Tehran, Iran

Award 1989 For Excellent Management at ERC (Engineering Research Center), Tehran, Iran

Computer Skills

Programming Languages

Fortran, C

Operating Systems

Dos, Unix, Windows

Software Packages

Extensive experience with MATLAB, SIMULINK, MAPLE and CC;

LMITOOL (For Linear Matrix Inequality Optimization)

SP (For Semi-definite Programming)

Documentation

Latex, Microsoft Word, FrameMaker

Publications

- Refereed Chapter Book: 2
- Refereed Journal Publications: 43
- Refereed International Conference Publications:98
- Refereed National Conference Publications: 42
- Technical Reports: 3

Chapter Book

- [1] Farrokh Payam, A., Yazdanpanah, M.J., and Fathipour, M., "A Robust Motion Tracking Control of Piezo-Positioning Mechanism with Hysteresis Estimation", Applications of Nonlinear Control, ISBN: 978-953-51-0656-2, DOI: 10.5772/ 38244, Published online: 13. June, 2012, Published in print edition: June, 2012
- [2] Tayyebi, A., Delavar, M.R., Yazdanpanah, M.J., Pijanowski, B.C., Saeedi, S., and Tayyebi, A.H., "A Spatial Logistic Regression Model for Simulating Land Use Patterns, A Case Study of the Shiraz Metropolitan Area of Iran", In "Advances in Earth Observation of Global Change" Edited by E. Chuvieco, J. Li, and Xi. Yang, Springer, 27-42, 2010, ISBN: 978-90-481-9084-3, DOI: 10.1007/ 978-90-481-9085-0_3
- [3] Ebrahimirad, H., and Yazdanpanah, M.J., "Sliding Mode Congestion Control in Differentiated Service Communication Networks", P. Langendoerfer et al. (Eds.): Wired/Wireless Internet Communication, Lecture Notes in Computer Science, Springer-Verlag Heidelberg, Vol. 2957, pp. 99-108, January 2004.

Journal Papers

- [4] Atashzar, S.F., Talebi, H.A., Shahbazi, M., Towhidkhah, F., and **Yazdanpanah**, **M.J.** "Robust trajectory modification for tip position tracking of flexible-link manipulators", *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering*, April 2012, vol. 226, no. 4, 523-536
- [5] Montaseri, Gh., and Yazdanpanah, M.J. "Robust Adaptive Control of Uncertain Nonlinear Systems using Mixed Backstepping and Lyapunov Redesign Techniques", Communications in Nonlinear Science and Numerical Simulation, 17 (2012) 3367–3380
- [6] Adhami Mirhoseini, A., Yazdanpanah, M.J., and Khaki Sedigh, A. "Robust Tracking of a Class of Perturbed Nonlinear Systems via Multivariable Nested Sliding Mode Control", *Journal of Dynamic Systems, Measurement and Control*, 134, 031004 (2012)
- [7] Amjadifard, R., Beheshti, M.T.H., **Yazdanpanah, M.J.**, "Robust Stabilization for a Class of Nonlinear Singularly Perturbed Systems", *Journal of Dynamic Systems, Measurement, and Control*, September 2011, Vol. 133 / 051004-1:6.
- [8] Sharbafi, M.A., and Yazdanpanah, M.J. "IDFC: A new approach to control bifurcation in TCP/RED", Journal of Network and Computer Applications, 34 (2011) 2042–2050
- [9] Nezhadfard, A., and Yazdanpanah, M.J. "Friction Compensation of Double Inverted Pendulum on a Cart using Locally Linear Neuro-Fuzzy Mode", *Neural Computing & Applications*, 14 July 2011, DOI 10.1007/s00521-011-0686-3
- [10] Binazadeh, T., and **Yazdanpanah, M. J.**, "Application of passivity based control for partial stabilization", *Nonlinear Dynamics and Systems Theory*, 11 (4) (2011) 373–382
- [11] Binazadeh, T., and Yazdanpanah, M. J., "Partial stabilization approach to 3-dimensional guidance law design", *Journal of Dynamic Systems, Measurement and Control, November 2011, Vol. 133, 064504:1-4*
- [12] Binazadeh, T., and **Yazdanpanah, M. J.**, "Partial stabilization of uncertain nonlinear systems", *ISA Transaction*, 51 (2012) 298–303
- [13] Montaseri, Gh., and **Yazdanpanah, M.J.** "Practical Output Regulation of Uncertain Strict-Feedback Form Systems", *Asian Journal of Control*, vol.15, no. 4, pp. 1-4, 2013, doi: 10.1002/asjc.388
- [14] Binazadeh, T., and **Yazdanpanah, M. J.**, "Robust partial control design for nonlinear control systems: A guidance application", *Proceedings of the Institution of Mechanical Engineers, Part I: Journal of Systems and Control Engineering* February 2012, vol. 226, no. 2, 233-242
- [15] Binazadeh, T., and **Yazdanpanah, M. J.**, "Identification of a Variable Mass Underwater Vehicle Via Volterra Neural Network", *Journal of Dynamic Systems, Measurement, and Control*, March 2010, Vol. 132 / 024501-1:7
- [16] Montaseri, Gh., and **Yazdanpanah**, **M.J.**, "Predictive control of uncertain nonlinear parabolic PDE systems using a Galerkin/neural-network-based model", *Communications in Nonlinear Science and Numerical Simulation*, 17 (2012) 388–404

- [17] Keighobadi, J., **Yazdanpanah, M.J.**, and Kabganian, M., "An enhanced fuzzy H_∞ estimator applied to low-cost attitude-heading reference system.", *Kybernetes* (0368-492X), 3/15/2011, Vol.40, Iss.3; p.300-326.
- [18] Shirani, F., **Yazdanpanah, M.J.**, and Nadjar Araabi, B., "Comments on "Controller Synthesis of Fuzzy Dynamic Systems Based on Piecewise Lyapunov Functions", *IEEE Transactions on Fuzzy Sustems*, Volume 18, Issue 1, February 2010, Article number 5313870, Pages 227-228
- [19] Ghafarri-Kashani, A., Faiz, J., and **Yazdanpanah, M.J.**, "Integration of nonlinear H_∞ and SMC techniques for motion control of permanent synchronous motor", *IET Electric Power Applications*, April 2010, Vol. 4, Iss. 4, pp. 267–280
- [20] Shafiei, M. H., and **Yazdanpanah, M. J.** "Stabilization of nonlinear systems with a slowly varying parameter by a control Lyapunov function", *ISA Transactions*, Volume 49, Issue 2, April 2010, Pages 215-221.
- [21] Binazadeh, T., **Yazdanpanah, M. J.** and Shafiei, M. H. "Identification of a Variable Mass Underwater Vehicle Via Volterra Neural Network", *Journal of Dynamic Systems, Measurement, and Control (J. Dyn. Sys., Meas., Control)*, March 2010, Volume 132, Issue 2, 024501 (Pages 024501-1: 024501-7)
- [22] Kebriaei, H., and **Yazdanpanah, M.J.**, "Robust adaptive synchronization of different uncertain chaotic systems subject to input nonlinearity", *Communications in Nonlinear Science and Numerical Simulation*, Volume 15, Issue 2, February 2010, Pages 430-441.
- [23] Farrokh Payam, A., Fathipour, M., and Yazdanpanah, M.J. "High precision Imaging for Non-Contact Mode Atomic Force Microscope Using an Adaptive Nonlinear Observer and Output State Feedback Controller", *Digest Journal of Nanomaterials and Biostructures*, Vol. 4, No. 3, September 2009, pp. 429 – 442.
- [24] Pijanowski, B.C., Tayyebi, A., Delavar, and Yazdanpanah, M.J., "Urban Expansion Simulation Using Geospatial Information System and Artificial Neural Networks", *International Journal of Environmental Research*, ISSN 1735-6865. Volume 3, Number 4, Autumn 2009, pp. 493-502.
- [25] Bavafa, E., and Yazdanpanah, M.J., Kalaghchi, B. and Soltanian-Zadeh, H. "Multiscale cancer modeling: In the line of fast simulation and chemotherapy", Mathematical and Computer Modelling, Volume 49, Issues 7-8, April 2009, Pages 1449-1464
- [26] Mirmomeni, M., and **Yazdanpanah, M.J.**, "An Unsupervised Learning Method For An Attacker Agent In Robot Soccer Competitions Based On The Kohonen Neural Network" (*International Journal of Engineering*) *IJE Transactions A: Basics*, Vol. 21, No. 3, pp. 255-268, September 2008
- [27] Nourouzi, M. R., and **Yazdanpanah**, **M.J.**, "Discrimination of ventricular fibrillation based on chaotic characteristics of electrocardiogram signals", *Iranian Journal Of Biomedical Engineering*, Spring 2007; 1(1):53-62.
- [28] Semsar, E., **Yazdanpanah**, M.J., and Lucas, C. "Nonlinear Control and Disturbance Decoupling of HVAC Systems Using Feedback Linearization and Backstepping with Load Estimation", *IEEE Transactions On Control Systems Technology*, VOL. 16, NO. 5, pp. 918-929, September 2008.
- [29] Keighobadi, J., Yazdanpanah, M.J., and Kabganian, M., "Fuzzy Variable Length Sliding Window Blockwise Least Square Algorithm with Application tovehicle Magnetic Heading Determination", *Iranian Journal of Mechanical Engineering*, Vol. 8, No. 2. March 2008, Pages 59-78.

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- [31] Malekmohamadi, I., R. Ghiassi, R., and **Yazdanpanah, M.J.**, "Wave hindcasting by coupling numerical model and artificial neural networks" *Ocean Engineering*, 35 (2008) 417-425.
- [32] Mohammadi-Milasi, R., Yazdanpanah, M.J., and Lucas, C. "Nonlinear Optimal Control of Washing Machine Based on Approximate Solution of HJB Equation", "Optimal Control, Applications and Methods", 2008; 29:1–18.
- [33] Tabesh, M., Gousheh, S., and Yazdanpanah, M.J., "Tehran Water Demand Prediction Using Artificial Neural Networks" (Farsi), *Journal of Uuniversity College of Engineering, University of Tehran*, Vol. 41, No.1, pp. 11-24, May 2007.
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- [35] Jalili, M., and **Yazdanpanah, M.J.**, "Transient stability enhancement of power systems via optimal nonlinear state feedback control", *Electrical Engineering*, Vol. 89, No. 2. (December 2006), pp. 149-156.
- [36] Karimi, H.R., and **Yazdanpanah, M.J.**, "A new modeling approach to single-link flexible manipulator using singular perturbation method", *Electrical Engineering*, Volume 88, Number 5, pp. 375 382, June 2006.
- [37] Karimi, H.R., **Yazdanpanah, M.J.**, R. V. Patel and K. Khorasani, "Modeling And Control Of Linear Two-time Scale Systems: Applied To Single-link Flexible Manipulator", *Journal of Intelligent & Robotic Systems*, Volume 45, Number 3, pp.235 265, June 2006.
- [38] Sheikholeslami, N., Shahmirzadi, D., Semsar, E., Lucas, E. and **Yazdanpanah**, **M.J.** "Applying Brain Emotional Learning Algorithm for Multivariable Control of HVAC Systems", *Journal of Intelligent and Fuzzy Systems*, Volume 17, Number 1, pp. 35-46, 2006.
- [39] Amjadifard, R., Beheshti, M.T.H., **Yazdanpanah, M.J.**, and Momeni, H.R., "Robust Regulation of a Flexible Joint Robot Manipulator using Slow-Fast Decomposition", (In Farsi) *Journal of School of Engineering*, Ferdowsi University of Mashhad, Vol. 17, No. 2, pp. 49-63, 2005.
- [40] Yazdanpanah, M.J., Madanian, E. and , A.M. "Channel Assignment in Cellular Communications Using a New Modification on Hopfield Networks", *Iranian Journal of Science & Technology*, Vol. 29, No. B4, 2005.
- [41] Esna Ashari, A., Khaki Sedigh, A., and **Yazdanpanah, M.J.**, "Reconfigurable control system design using eigenstructure assignment: static, dynamic and robust approaches", *International Journal of Control*, Volume 78, Number 13, 10 September 2005, Pages: 1005 1016.
- [42] Karimi, H.R. and **Yazdanpanah**, **M.J.**, "Robust control for a class of uncertain state-delayed singularly perturbed systems", *Asian Journal of Control*, Volume: 7, Issue Number: 2, Page(s): 202-208, June 2005.
- [43] Afkhami, S., Jabedar Maralani, P. and **Yazdanpanah, M.J.**, "Stabilization and Improvement of Performance by Extension of Universal Formula in the Presence of Disturbance", *IEE Proceedings-Control Theory and Applications*, Volume 152, Issue 2, 4 March 2005, Page(s):229 237.

- [44] Amjadifard, R., Beheshti, M.T.H. and **Yazdanpanah**, **M.J.**, "Robust Regulation Of A Class Of Nonlinear Systems Using Singular Perturbation Approach", *Amirkabir Journal of Science & Technology*, Vol. 15/No. 60-A/(Electrical Engineering), Fall-Winter 2004-2005.
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- [46] Hatami Yazd, M. and **Yazdanpanah**, **M.J.**, "Forecasting Stock Price Direction Using a Neural Network Predictor", *Review of Business Research*, Vol. II, No. 1, pp. 126133, 2004.
- [47] Hosseini, S.M.K., Zarei-Hanzaki, A., Yazdanpanah, M.J., and Yue, S., "ANN model for prediction of the effects of composition and process parameters on tensile strength and percent elongation of Si–Mn TRIP steels", *Journal of Materials Science and Engineering A*, Vol. 374, pp. 122-128 (15 June 2004).
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- [49] **Yazdanpanah, M.J.** and Fallah, E., "The Design of PSS using Nonlinear Optimal Control", (In Farsi), *Amirkabir Journal of Science & Technology*, Vol. 13, No. 52, pp. 525-536, Fall 2002.
- [50] Karimi, H.R. and Yazdanpanah, M.J., "Robust Stability Analysis of Singularly Perturbed Systems Using the Structured Singular Values Approach", *Scientia Iranica*, Volume 9, Number 4, Fall 2002.
- [51] Bahrami, A. and **Yazdanpanah, M.J.**, "Design of A Conventional Controller under Mixed H₂/H_∞ Criterion using Genetic Algorithm", (In Farsi) *Journal of School of Engineering*, Ferdowsi University of Mashhad, Vol. 14, No. 1, 2002.
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- [53] Karimi, H.R. and Yazdanpanah, M.J., "Robust Stability and Disturbance Attenuation for a Class of Uncertain Singularly Perturbed Systems", *Transactions on Control, Automation and Systems Engineering*, Vol. 3, No.3, September 2001.
- [54] **Yazdanpanah, M.J.**, Khorasani, K. and Patel, R.V., "On the Estimate of the Domain of Validity in Nonlinear H_{∞} Control", *International Journal of Control*, special issue on *Breakthroughs in the Control of Nonlinear Systems*, Vol. 72, No. 12, pp. 1097-1105, August 1999.
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- [56] **Yazdanpanah, M.J.** and Lucas, C. "Transient Stability of Power Systems" (In Farsi), *Ferdowsi University Magazine*, Mashad, Iran, 1988.

International Conference Papers

[57] Amini Boroujeni, E., **Yazdanpanah**, M.J., and Momeni, H.R., "Controller Design for Fractional Order Chaotic Lu System", 2012 American Control

- Conference, June 27-June 29, 2012, Fairmont Queen Elizabeth, Montréal, Canada
- [58] Sharbafi, M.A., **Yazdanpanah, M.J.**, and Nili Ahmadabadi, M., "Controllers for Robust Hopping with Upright Trunk based on the Virtual Pendulum Concept", the 2012 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2012), October 7-12, 2012, Vilamoura, Algarve [Portugal]
- [59] Karami, A., and **Yazdanpanah, M.J.**, "Structured Wavelet-based Neural Network for Control of Nonlinear Systems", In the Proceedings of the 50th IEEE Conference on Decision and Control and European Control Conference, December 12-15, 2011, Hilton Orlando Bonnet Creek, Orlando, Florida, USA.
- [60] Adhami-Mirhosseini, A., Aguiar, A.P., and **Yazdanpanah, M.J.**, "Seabed Tracking of an Autonomous Underwater Vehicle with Nonlinear Output Regulation", In the Proceedings of the 50th IEEE Conference on Decision and Control and European Control Conference, December 12-15, 2011, Hilton Orlando Bonnet Creek, Orlando, Florida, USA.
- [61] Tayyebi, A.H., Homayouni, S., Shan, J., Yazdanpanah, M.J., Pijanowski, B.C., and Tayyebi, A., "Multi-Scale Analysis Approach of Simulating Urban Growth Pattern using a Land Use Change Model", In the Proceedings of the 7th International Symposium on Spatial Data Quality (ISSDQ 2011), Coimbra, Portugal, October 12-14, 2011.
- [62] Tayyebi, A.H., Homayouni, S., Shan, J., Yazdanpanah, M.J., Pijanowski, B.C., and Tayyebi, A., "Uncertainty Framework in Land Use Change Models: An Application of Data, Model Parameter and Model Outcome Uncertainty in Land Transformation Model", In the Proceedings of 7th International Symposium on Spatial Data Quality (ISSDQ 2011), Coimbra, Portugal, October 12-14, 2011.
- [63] Tayyebi, A.H., Homayouni, S., Shan, J., Yazdanpanah, M.J., Pijanowski, B.C., and Tayyebi, A., "Model Parameter Uncertainty Assessment in the Land Transformation Model", In the Proceedings of 7th International Symposium on Spatial Data Quality (ISSDQ 2011), Coimbra, Portugal, October 12-14, 2011.
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- [65] Khailaie, S., Adhami-Mirhosseini, A., and **Yazdanpanah, M.J.**, "Analytic Approximate Solution to the Nonlinear Output Regulation Problem Using Galerkin Approximation Method", In the Proceedings of the 18th IFAC World Congress, Milano (Italy), August 28 September 2, 2011
- [66] Agahi, H., and **Yazdanpanah, M.J.**, "Set-point Regulation of Constrained Strongly Monotone Systems", In the Proceedings of the 18th IFAC World Congress, Milano (Italy), August 28 September 2, 2011
- [67] Sharbafi, M.A., Yazdanpanah, M.J., and Nili Ahmadabadi, M., "Increasing the Robustness of Acrobot walking control using compliant mechanisms", 2011 IEEE/RSJ International Conference on Intelligent Robots and Systems, September 25-30, 2011, San Francisco, California
- [68] Mobayen, M.A., Yazdanpanah, M.J., and Johari Majd, V., "A Finite-Time Tracker for Nonholonomic Systems Using Recursive Singularity-Free FTSM", 2011 American Control Conference - ACC 2011, San Francisco, California, USA, June 29 - July 1, 2011

- [69] Atashzar, S.F., Talebi, H.A., **Yazdanpanah, M.J.**, and Towhidkhah, F., "Tip Position Tracking of Flexible-Link Manipulators Based on Online Robust Trajectory Modification", In the Proceedings of the IECON 2010 36th Annual Conference on IEEE Industrial Electronics Society, Glendale, AZ, 7-10 Nov. 2010
- [70] Farjadian, A.B., and Yazdanpanah, M.J., "Chattering Reduction by the means of Intelligent Sliding mode Controller", International Conference on Control, Automation and Systems (ICCAS 2010), October 27-30, 2010 KINTEX, Gyeonggi-do, KOREA
- [71] Roshani Tabrizi, P., Rezatofighi, S. H., and **Yazdanpanah, M.J.,** "Using PCA and LVQ Neural Network for Automatic Recognition of Five Types of White Blood Cells", 32nd Annual International IEEE EMBS Conference, August 31-September 4, 2010, Buenos Aires Sheraton Hotel, Buenos Aires, Argentina
- [72] Shahbazi, M., Talebi, A., and Yazdanpanah, M.J., "A Control Architecture for Dual User Teleoperation with Unknown Time Delays: A Sliding Mode Approach", In the Proceedings of 2010 IEEE/ASME International Conference on Advanced Intelligent Mechatronics, July 6-9, 2010, Montréal, Canada
- [73] Naderi, R., Yazdanpanah, M.J., Azemi, A., and Nazem Roaya, B. "Tracking Normal Action Potential Based on the FHN Model Using Adaptive Feedback Linearization Technique", In the Proceedings of the 2010 IEEE Multi-conference on Systems and Control, September 8-10, 2010, Yokohama, Japan
- [74] Tayyebi, A., Delavar, M. R., Pijanowski, B.C, and **Yazdanpanah**, **M.J.**, "Accuracy Assessment in Urban Expansion Model", In the Proceedings of the 6th International Symposium on Spatial Data Quality (ISSDQ) held July 5-8 2009, in St. John's, Newfoundland and Labrador, Canada. Reprinted in a revised version in "Spatial data quality: from process to decisions / edited by Rodolphe Devillers, Helen Goodchild", Taylor and Francis, CRC Press, Canada, pp. 107-115.
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- [76] Naderi, R., Azemi, A., and **Yazdanpanah, M.J.** "Control of Heart Conduction System Arrhythmia by Means of Sliding Mode Scheme", In the Proceedings of the 17th Mediterranean Conference on Control and Automation, June 24-26, 2009, Makedonia Palace, Thessaloniki, Greece.
- [77] Tayyebi, A., Delavar, M. R., Saeedi, S., and **Yazdanpanah, M.J.**, "A spatial logistic regression model for simulating land use patterns: A case styudy: Shiraz metropolitan area", In the Proceedings of the 2nd international conference on earth observation for global changes (EOGC 2009), Cichuan, China, 25-29 May 2009.
- [78] Farrokh Payam, A., Fathipour, M., and **Yazdanpanah, M.J.** "A Backstepping Controller for Piezoelectric Actuators with Hysteresis in Nanopositioning", In the Proceedings of the 4th IEEE-NEMS, Shenzhen, China, January 5-8, 2009.
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