

CURRICULUM VITAE

Mohammad T.H. Beheshti, PhD
Associate Professor, Control Group
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EDUCATION

PhD Control 1987-1992

Electrical Engineering Department, **Wichita State University**, Wichita, Kansas USA.

Dissertation: Controller Design for Discrete Time Singularly Perturbed Systems

MS Control 1984-1987

Electrical Engineering Department, **Wichita State University**, Wichita, Kansas, USA.

Directed Study: Optimal Observer-Based Controller Design for Singularly Perturbed Systems.

BS Electrical Engineering 1979-1984

Electrical Engineering Department, **University of Nebraska**, Lincoln, Nebraska, USA

WORK EXPERIENCE

1. Kent State University (Visiting Scholar): Research in modeling and robust optimal control of dynamical systems. Ashtabula, Ohio 2008- 2009

2. Tarbiat Modarres University (TMU), Tehran- Iran 1995-Present
Associate Professor of School of Engineering, EE Department, Control Group

Responsibilities:

- Teaching graduate level courses
- Director of Control and Communication Network Lab (CCNL)
- Directing Ph.D. and MS student dissertations and thesis.
- Graduate coordinator and the **head of control group**. (1996-1999)
- **Head of electrical engineering department** (1999-2001)
- **Head of IT group**. (2005)
- International and Public Relations Chair in 16th Iranian Conference on Electrical Engineering.

3. Iran Telecom Research Center, Tehran, Iran 2001-2004
Director of International Affairs and Education Center

Note: TMU is a strictly post graduate school

4. Invited Lecturer

Isfahan University of Technology, Fall-1994
Amir-Kabir University of Technology, Fall-1996, spring-1996, Fall-1997, spring-1998
University of Tabriz, Spring-1997
Azad University, Najaf-Abad Campus, Isfahan, Iran, 1993-1995
Azad University - Post-graduate Campus, Tehran Iran 1998-Now.

TEACHING EXPERIENCE

I) Graduate Courses Taught (Electrical Engineering)

Modern Control Theory
Discrete-Time Control Systems
Optimal Control Theory
Random Variables and Random Processes
Multivariable Control Systems
Singular Perturbation Control Theory
Robust Control Systems
Adaptive Control Systems
Computer Networks Control
Traffic Control of Computer Networks
Performance Evolution of Computer Networks

II) Undergraduate Courses Taught

Computer Programming (FORTRAN) (*Wichita State University, Wichita, KS, USA*)
Electrical Circuits (I) (*Wichita State University, Wichita, KS, USA*)
Electrical Circuits (II) (*Malik-Ashtar University, Shahinshahr, Isfahan, Iran*)
Engineering Mathematics (*Imam-Ali University, Tehran, Iran*)
Signals and Systems (*Malik-Ashtar University, Shahinshahr, Isfahan, Iran*)
Classical Control Systems (*Amirkabir University, Tehran Iran*)

III) Lab Instructor

Electrical Circuit Lab (*Wichita State University, Wichita, KS, USA*)
Information Processing Lab (*Wichita State University, Wichita, KS, USA*)
Control System Lab (*Malik-Ashtar University, Shahinshahr, Isfahan, Iran*)

ADVISING ACTIVITIES

Master Thesis Supervised: 62⁺ students
Ph.D. Dissertation Supervised: 6 students
Master Students (Currently Supervising): 5 students
Ph.D. Dissertation (Currently Supervising): 5 students

FUNDED RESEARCH

- 1. Iranian Telecommunication Research Center (ITRC), Tehran, Iran**
Title: “Structural design of interfaces for the ATM-switching networks”, 1997-1998
Position: Project Supervisor
- 2. CCAC Center, University of Tarbiat Modares, Tehran, Iran**
Title: “Design of a computer control system”, 1997-1998
Position: Project Assistant Supervisor
- 3. Hydraulic Company of Iran, Tehran, Iran**
Title: “Design of PLC control for water treatment of a sugar plant factory”, 1996-1997
Position: Project Supervisor
- 4. ITRC, Tehran, Iran**
Title: “Modeling and analysis of ATM switching networks”, 1998-1999
Position: Project Supervisor
- 5. ITRC, Tehran, Iran**
Title: “Standardization of ATM component”, 1998-1999
Position: Project Supervisor
- 6. ITRC, Tehran, Iran**
Title: “Real-time traffic descriptor estimation of voice and data for ATM networks”, 2000-2001
Position: Project Supervisor
- 7. ITRC, Tehran, Iran**
Title: “Software design and simulation of IP-MPLS switching networks”, 2002-2003
Position: Project Supervisor
- 8. SBDC, Tehran, Iran**
Title: “Information security center based On world standard”, 2003

Position: Project Supervisor

9. ITRC, Tehran, Iran

Title: "Engineering export policies & guidelines for competition in the international ICT market", 2006-2007

Position: Project Supervisor

10. TMU, Tehran, Iran Title: "E-learning Master's Program Development", 2007- 2008

Position: Project Supervisor and Consultant

PUBLICATIONS

International Journal Papers

1. Mir Mohsen Pedram, Hossein Seifi, **M.T.H. Beheshti**, Shahrokh Farhangi, "Position Control of an Induction Motor Using 2nd Order Sliding Mode Controller and Improving the Response by Fuzzy Approach", *Journal of Amir-Kabir*, Vol. 51, Year 13, ,pp. 426-438, Summer 1992.
2. **M.T.H. Beheshti**, S. Hatami, B. Ghanbari "A Fuzzy Controller Design for ATM Network Traffic", *Int'l Journal of Communication Engineering (Iran Telecom Research Center)*, No. 2, pp. 71-78, Winter 2002.
3. S. Ganjefar, H.R. Momeni, F.J.Sharifi, **M.T.H. Beheshti**, "Teleportation Control System Using Wave Variable and Smith Predictor Combination with Variable Time Delay Prediction", *Engineering Journal of Tarbiat Modares University*, No. 13 , pp. 73-83, 2003.
4. **M.T.H. Beheshti**, M.H. Miran Beygi, "A Comparison Study of Fixed and Moving-Block Signaling in Rapid Transit Railways", *Engineering Journal of Tarbiat Modares University*, No. 13, pp. 104-112, 2003.
5. **M.T.H. Beheshti**, S.M. Nematollahzadeh, "Design of Active Suspension Control Using Singular Perturbation Theory", *Iranian J. Science & Technology, Transaction B*, Vol. 27, No. B4, pp 691-700, 2003.
6. **M.T.H. Beheshti**, A. Ahvazi, "Nonlinear H ∞ Controller Design for Position Control of Satellite", *Engineering Journal of Tarbiat Modares University*, Special Issue, Electrical Engineering Papers, pp. 1-20, Summer 2004.
7. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, "Robust Regulation of a Class of Nonlinear Systems Using Singular Perturbation Approach" , *Journal of Amir-Kabir*, No 60, Year 15, pp. 29-37, Winter 2005.
8. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, H.R. Momeni"Robust Regulation of a

Flexible Joint Robot Manipulator Using Dynamic Separation", *Engineering Journal of Mashhad University*, No 2, Year 17, pp. 49-64, 2005,.

9. A.Fakharian , **M.T.H. Beheshti**, M.Najafi, "Adomian Decomposition Method Approach for Solving Riccati Differential Equation", *WSEAS Transaction on Signal Processing*, Vol. 2, pp732-737, May 2006,
10. A. Nejati, M. Farhudi, **M.T.H. Beheshti**, "Stability Robustness Design Power System Using H_{∞} Control Theory ", *Quarterly Electrical Engineering Journal of Majlasi*, Vol. 1, pp. 35-41, Summer 2007.
11. M. Torkamandi, **M.T.H. Beheshti** "Design of Adaptive Predictive Congestion Controller Based on Active Queue Management in TCP/IP Routers", *Journal of Faculty of Engineering (Tehran University)*, Vol. 107, pp. 587-596, Fall 2007,
12. A. Fakharian, **M.T.H. Beheshti** "Solving Linear and Nonlinear Control Problem Using Modified Adomian Decomposition Method", *Journal of Computer and Robotics*, Vol. 1, pp.1-8, Spring 2008.
13. M.A.Bagheri, **M.T.H. Beheshti**, S. Alidusti. "Internet Banking Adoption: Extension of TAM", *Journal of Information Sciences and Technology, (Indexed in: LISA & SCOPUS)*, Vol. 24, No. 3, pp. 5-34, Spring 2009.
14. R. Amjadi-fard, **M.T.H. Beheshti**, H. Khaluzadeh, K. Morris "Robust Hinf Control of an Experimental Inverted Pendulum Using Singular Perturbation Approach", *Journal of Control*, Vol. 3, No. 2, pp10-16, Summer 2009.
15. .M. Ashrafi, **M.T.H. Beheshti**, Sh. Shahidi, F. Ashrafi, "Application of Artificial Neural Network to Predict Graft Survival After Kidney Transplantation: Reports of 22 Years Follow up of 316 Patients in Isfahan", *Journal of Faculty of Medicine (Tehran University)*, Vol. 67, No. 5, pp. 353-359, Aug 2009.
16. M.A. Ardestani, **M.T.H. Beheshti**, "A Robust Active Queue Management for Delay Sensitive Internet Traffic", *Journal of Control*, Vol.3, No. 3, pp. 9-21, Fall 2009.
17. M.M. Asheghan, **M.T.H. Beheshti** "An LMI approach to robust synchronization of a class of chaotic systems with gain variations", *Chaos, Soliton and Fractals, Published by Elsevier*, Vol. 42, pp.1106-1111, 2009.
18. M.A. Ardestani, **M.T.H. Beheshti**, "A Robust Discrete -Time Controller of Delay Sensitive Applications, *IEICE Electronics Express*, Vol. 6 No. 22, pp. 1548-1555, Nov. 2009.
19. F. Jamshidi, A. Fakharian, **M.T.H. Beheshti**. "Fuzzy Supervisor Approach on Logic -Based Switching H2/Hinf", *Journal of Systems and Control Engineering*, Vol. 224 Part 1, pp. 11-19, Sep. 2009.
20. A. Fakharian, F. Jamshidi, **M.T.H. Beheshti**, M.A. Ardestani "Switching H2/Hinf Control of Singularly Perturbed Systems", *Australian Journal of Basic Applied Sciences*, Vol.3(4) pp

4243-4252, 2009.

21. M.M. Asheghan, **M.T.H. Beheshti**. Robust Synchronization of a class of perturbed Chaotic System: An LMI approach. *Int. J. of Nonlinear Sciences & Numerical Simulations*, Vol. 10, pp.1345-1353, 2009.
22. A.Fakharian, F. Jamshidi, **M.T.H. Beheshti**, "Logic Based Switching H_2/H_{∞} Control of Linear Singular Perturbation Systems : A Fuzzy Supervisor Approach", *Journal of control*, Vol. 3 No. 3, pp. 64-72, Fall 2009.
23. V. Nekoukar, **M.T.H. Beheshti**, "A Local Linear Radial Basis Function Neural Network for Financial Time-Series Forecasting", *Journal of Applied Intelligence, Published by Springer*, Vol. 33, No. 3, pp.352-356, Dec 2010.
24. A. Fakharian, **M.T.H. Beheshti**, A. Davari, "Solving the Hamilton -Jacobi-Bellman Equation Using Adomian Decomposition Method", *International Journal of Computer Mathematics, Published by Taylor & Francis*, Vol. 87, No. 12, pp2769-2785, Oct. 2010.
25. S.S. Delshad, **M.T.H. Beheshti** " Comments on: Linear Observer Based Projective Synchronization in Delay Rosslea System Dibakar Ghosh, Papri Saha, A.Roy Chowdhury", *Commun in Nonlinear Sci and Numer Simulat*, Vol15, Issue 12, pp 4230-4232, 2010
26. R. Amjadi-fard, **M.T.H. Beheshti**, "Robust Disturbance Attenuation of a Class of Nonlinear Singularly Perturbed Systems", *Intentional Journal of Innovative Computing Information and Control*, Vol. 6, No. 3A, pp 913-920, March 2010.
27. S.S. Delshad, M.M.Asheghan, **M.T.H. Beheshti** "Robust Stabilization of Fractional-Order Systems with Interval Uncertainties via Fractional-Order Controllers" *Advances in Diference Equation*, Hindawi Publishing Corporation, pp 1-15 ,Vol. 2010
28. M.M. Asheghan, **M.T.H. Beheshti**, M.S. Tavazoei" Robust Synchronization of perturbed Chens fractional-order Chaotic Systems " *Commun Nonlinear Sci Numer simulat* 2011, No 16, pp 1044-1051.
29. S.S. Delshad, **M.T.H. Beheshti** "Comment on: "Chaos in the Fractional Order Unified System and its Synchronization" *Journal of the Franklin Institute* 345 (2008) 392-401", 347, 2010, 1795-1796.
30. F. Jamshidi, M.G. Moghadam, **M.T.H. Beheshti**" Synthesis of a Logic-Based Switching H_2/H_{∞} Controllers: An Intelligent Supervisor Approach" *ICIC Express Letters*, vol. 4, No. 1, 2010, pp 7-12
31. M.M. Asheghan, **M.T.H. Beheshti**, M.S. Tavazoei "Comments on "Synchronization and anti-synchronization of new uncertain fractional-order modified unified chaotic systems via novel active pinning control" *Commun Nonlinear Sci Numer simulate* 16(2011) pp 2656-2657.

32. S.S. Delshad, M.M Asheghan, **M.T.H. Beheshti**, "Synchronization of N-Coupled Incommensurate Fractional-Order Chaotic Systems with Ring Connection" *Communications in Nonlinear Science and Numerical Simulations*, No 16 (2011) 3815-3824.
33. M.G. Moghadam, **M.T.H. Beheshti**, " A New Approach to H_2 / H_∞ Dynamic Output Feedback Control for Singularly Perturbed Systems via LMI Optimization" *Journal of Communication and Computer*, No 8 (2011) pp 71-78.
34. A. Abdolmasoumi, S.S. Delshad, **M.T.H. Beheshti** "Congestion Control of TCP-WESTWOOD Using AQM-PI Controller" *International Journal of Computer Network & Communications* Vol.3, No2, March 2011, pp 180-195
35. M.G. Moghadam, **M.T.H. Beheshti**"On Output Feedback Multiobjective Control for Singularly Perturbed Systems" *Hindawi Publishing Corporation Mathematical Problems in Engineering*, 2011, pp 1-28
36. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah" Robust stabilization for a class of Nonlinear singularly perturbed" *ASME journal of Dynamic Systems, Measurement, and*, September 2010, vol 133, No 51004, pp 1-6.
37. M.M. Asheghan, J. Miguez **M.T.H. Beheshti**, M.S. Tavazoei "Robust outer synchronization between two complex network with" *Chaos* 2011, vol 21, N 033121, pp 1-12.


Refereed Conference Papers

1. **M.T.H. Beheshti**, M.E. Sawan, "On the Robustness of Observer-Based Controller", in *Proc. ACC 1987*, U.S.A.
2. **M.T.H. Beheshti**, M. Jaafari, "Loop Shaping and High Frequency Compensation Using Singular Perturbation Theory", in *Proc. 6th ICEE*, Tehran, Iran, pp 109-114, 1998.
3. **M.T.H. Beheshti**, M.E. Sawan, "A Note on Discretization of Continuous-Time Standard and Non-Standard Singularly Perturbed Systems", in *Proc 33rd IEEE Conf. Circuits and Systems*, Calgary, Canada, pp 527-529, 1990.
4. **M.T.H. Beheshti**, M.E. Sawan, "Feedback Control of Nonstandard Discrete-Time Singularly Perturbed Systems", in *Proc 31st IEEE Conf. Decision and Control*, U.S.A, 1992.
5. **M.T.H. Beheshti**, M.E. Sawan, "Observer Based Controller Design for Nonstandard Singularly Perturbed Systems", in *Proc 35th IEEE Conf. Circuits and Systems*, 1992, U.S.A.
6. **M.T.H. Beheshti**, A Khalili, "An Adaptive Fuzzy Logic Algorithm for Solving Inverse

- Kinematics of Redundant Robots", in *Proc. IASTED Int'l., Conference on Intelligent Systems and Control*, pp 185-188, Halifax, Canada 1998.
7. **M.T.H. Beheshti**, M.H. Miran Beygi, "Fixed Block vs. Moving Block Signaling in a Rapid Transit Railway", in *Proc. 7th ICEE*, Tehran, Iran, pp 121-130, 1999.
 8. S. Hosseinnia, V. Tahani, **M.T.H. Beheshti**, "Non Liner H Speed Control of a Series Dc Motor ", in *Proc. 7th ICEE*, Tehran, Iran, pp 35-43, 1999.
 9. **M.T.H. Beheshti**, A. Khalili, "Obstacle Avoidance for Kinematic ally Redundant Robots Using Adaptive Fuzzy Logic (AFL) Algorithm", in *Proc. ACC 1999*, San Diego, CA,P.P 27-34 1999
 10. **M.T.H. Beheshti**, S. Gangehfar, H. Momeni, "Robust Stability Analysis of Singularly Perturbed Systems", *Proceedings of 7th ICEE*, May 1999, Tehran, Iran, pp 25-33
 11. **M.T.H. Beheshti**, A. Khalili, "Distribution Automation in Electrical Networks", *Proceedings of 2nd National Energy Congress*, May 1999, Tehran, Iran pp 1279-1289.
 12. **M.T.H. Beheshti** R.Amjadi-fard ,A. Khalozadeh " An Optimal H-inf Controller for Two- Time Scale Systems" in *Proc. 8th ICEE*, Isfahan, Iran, pp 1-7, 2000.
 13. .M.R. Haghifam, H.R. Momeni, **M.T.H. Beheshti**, " Electrical Distribution Networks Automations" in *Proc. 2rd National Energy Congress*, Iran, pp 1279-1289, 2000.]
 14. **M.T.H. Beheshti**, S.M. Nematollahzadeh, "Controller Design for Active Suspension System Using Singular Perturbation Theory", in *Proc. 9th ICEE*, Tehran, Iran, pp 1-8, 2001.
 15. **M.T.H. Beheshti**, A. Khalili, "Distribution Automation Using Distribution Line Carrier (DLC) Systems", in *Proc. 3rd National Energy Congress*, Tehran, Iran pp 706-719, 2001.
 16. **M.T.H. Beheshti**, S.M. Nematollahzadeh, "Design of Active Suspension Control Using Singular Perturbation Theory" *IFAC 2002*, Barcelonan, Spain, 2002.
 17. M.M. Rezaee, **M.T.H. Beheshti**, "A New Hybrid Boiler Master Controller", in *Proc. ACC 2002*, pp 2070-2075, Canada, 2002.
 18. **M.T.H. Beheshti**, A. Khalili, "Connection Admission Control (CAC) Based on Fuzzy Adaptive Algorithem ", in *Proc. 10th ICEE*, Tabriz, Iran, pp 32-39, 2002.
 19. **M.T.H. Beheshti**, A. Ahvazi, " Nonlinear H_∞Controller Design for Control Position of a Satellite", in *Proc. 10th ICEE*, Tabriz, Iran, pp 401-410, 2002.
 20. **M.T.H. Beheshti**, M.M. Rezaee, "A New Hybrid Boiler Master Controller", in *Proc. 10th ICEE*, Tabriz, Iran pp 563-569, 2002.
 21. M.M. Rezaee, **M.T.H. Beheshti**, "Boiler Master Controller by a Neural Self-Tuned PID", in *Proc. 7th National Iranian Chemical Engineering Congress*, University of Tehran, Tehran, Iran,

pp 155-163, 2002.

22. M.M. Rezaee, **M.T.H. Beheshti**, M. Rezaee, "Modeling and Neuron-Adaptive Control of Steam Pressure in Drummed Boilers", in *Proc. 7th National Iranian Chemical Engineering Congress*, University of Tehran, Tehran, Iran, pp 148-154, 2002.
23. **M.T.H. Beheshti**, M.M. Rezaee, "A New Hybrid Boiler Master Controller" in *Proc. of ACC Conference*, May 2002, Anchorage-Alaska 563-569
24. **M.T.H. Beheshti**, A Khalili, B Ghanbari, " An Optimized Adaptive Fuzzy Inverse Kinematics Solution for Redundant Manipulators", in *Proc. IEEE Conf. Intelligent Control*, Huston Texas, pp. 924-930, 2003.
25. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, "Robust Regulation of a Class of Nonlinear System Using Singular Perturbation Approach", in *Proc. ECC 2003*, Cambridge UK, pp 11-13 2003
26. G Etemadinezhad, **M.T.H. Beheshti**, "Congestion Control in Differentiated Services Networks: Fuzzy PID Approach", in *Proc. Australian Telecommunication Networks and Applications*, Melbourne, Australia, pp 81-85. 2003
27. S. Gangehfar, H. Momeni, F.J. Sharifi . **M.T.H. Beheshti** " Prediction of Delay Time for Teleoperation Systems in Augmented Wave Variables and Smith Predictor " in *Proc. ACC 2003*, 11th Int Conf. on Advanced Robotics, Coimbra, Portugal ,pp 520-525.2003
28. A Akbarzadeh, **M.T.H. Beheshti**, "Auto Pilot Design for Roll Channel of a Surface to Air Missile Using H_{∞} with Fuzzy Gain Scheduling", in *Proc. 4th Fuzzy Sets and Applications Conference*, Univ. of Mazandaran, Mazandaran Iran, pp 23-29, 2003.
29. **M.T.H. Beheshti**, M Monemi, S Saeedi, "Robust Congestion Control Design for AQM in Differentiated Services Communication Networks", in *Proc. IST 2003*, Isfahan Iran, pp 81-85, 2003.
30. **M.T.H. Beheshti**, A Khalili, " TCP Congestion Control Using an Adaptive Algorithm", in *Proc. IST 2003*, Isfahan Iran, pp 509-513, 2003.
31. S. Ganjefar, H.R. Momeni, F.J. Sharifi **M.T.H. Beheshti**, "Prediction of Delay Time for Teleoperation Systems in Augmented Wave Variables and Smith Predictor", in *Proc. 11th ICEE*, Tehran, Iran, pp 149-157, 2003.
32. S.M.A. Beheshti, **M.T.H. Beheshti**, "Modeling and Controlling of Nomadic Serve System Hinf", in *Proc. 6th Manufacturing and Production Engineering*, Tehran, Iran, pp 1-11, 2004.
33. G. Etemadinezhad, **M.T.H. Beheshti**, " An Intelligence Approach to Congestion Control in Differentiated Services Networks ", in *Proc. 12th ICEE*, Mashhad, Iran, pp 125-130, 2004.
34. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, H.R. Momeni, "Robust Regulation of Synchronous Generator Parameters Using Singular Perturbation Approach", in *Proc. III Int'l*

- Conf. System Identification and Control Problems, Moscow, Russia, pp 1288-1294, 2004.*
35. Mehrjerdi, **M.T.H. Beheshti**, k. Lucas, "Robust Control Theoretic Approach and Dynamic Analysis of Congested Multi-Router TCP Networks", in *Proc. IST 2005*, Shiraz, Iran, pp 505-511, 2005.
 36. S.Saeedi, **M.T.H. Beheshti**, M. Monemi, "Active Queue Management (AQM) for TCP/IP Networks Using Discrete Time Sliding Mode Control (DSMC) ", in *Proc IEEE Conf. Control Application*, Toronto, Canada, pp 727-730, 2005.
 37. A. Fakharian, **M.T.H. Beheshti**, M. Najafi, "A New Algorithm for Solving Riccati Equation Using Adomian Decomposition Method ", in *Proc. 9th WSEAS International Conference on Applied Mathematics*, Istanbul, Turkey, pp 74-77, 2006. .
 38. N. Taherkhani, M.M. Sepehri, **M.T.H. Beheshti**, "A Framework to Determine The Priorities of Improvement Factors of Customer Satisfaction in Companies", in *Proc. International Marketing Management Conference*, Tehran, Iran, 2006.p.p 1-12
 39. M. Ashrafi, **M.T.H. Beheshti**, " Radio Frequency Identification, Applications & Challenges ", *1st RFID International Conference*, Tehran, Iran, 2007.
 40. A. Fakharian, **M.T.H. Beheshti**, "  A New Algorithm Based On The Adomian Decomposition Method For Solving Riccati Equation in Linear Optimal Control", in *Proc. 15th ICEE*, Tehran, Iran, pp 21-26, 2007.
 41. A.H Abolmasoumi, **M.T.H. Beheshti**, S. Jalili "Congestion Control Of Computer Networks Based On TCP-Westwood Using AQM-PI Controller ", in *Proc. 12th International Conference of Computer Society*, Tehran, Iran pp 764-771, 2007.
 42. G. Habibi, A. Masihi, **M.T.H. Beheshti**, " Binary Integer Programming Model Of Paint Robot Path Planning ", in *Proc. 33rd IEEE Conf. Industrial Electronics Society*, Taipei, Taiwan, pp 2841-2845, 2007.
 43. G. Habibi, **M.T.H. Beheshti**, " Applied Fixed-Order H^∞ Controller Design For Flexible Transmission System ", in *Proc. 33rd IEEE Conf. Industrial Electronics Society*, Taipei, Taiwan, pp 510-515, 2007.
 44. M. Farhoudi, , **M.T.H. Beheshti**, "A Case Study of the Multiobjective H_2 / H^∞ Control via Finite Dimensional Youla Parameterization and LMI Optimization", in *Proc. 33rd IEEE Conf. Industrial Electronics Society*, Taipei, Taiwan, pp 493-497, 2007.
 45. A.Shoja-Sefat, **M.T.H. Beheshti**, H.Moradi "A New Statistical Model for Call Holding Time Simulation In The Telephony Networks", in *Proc. IEEE Conf. Signal Processing And Communications*, Dubai, U.A.E, pp 1359-1362, 2007.
 46. F. Jamshidi, **M.T.H. Beheshti**, M.G. Moghadam, R. Vahidnia, M. Rezaeemanesh " A new Approach for Fuzzy Supervisor of H_2/H^∞ Controllers "Proceedings of the 2nd joint Congress on Fuzzy and Intelligent Systems of Iran,2008.

47. A. Pourmirza, A.Wallstrom, **M.T.H. Beheshti**, " Adoption of Internet Banking Services by Iranian Customers': An Empirical Qualitative Investigation", *The First eCity Conference*, Tehran, Iran, 2008.
48. A. Fakharian, **M.T.H. Beheshti**, "Linear and Nonlinear Optimal Problem Solution Using Modified Adomian Decomposition Method", in *Proc. 16th ICEE*, Tehran, Iran, pp 243-249, 2008.
49. S.S. Delshad , **M.T.H. Beheshti**, A.Golabi " Chaos synchronization of hyper chaos Lorenz system via nonlinear control " 6th international conf on Electrical Engineering, computing science and Automatic Control ,CCE(formerly know as ISEE) Toluca, Mexico,pp 10-13, 2009
50. Saleh Sayyad Delshad, Javad Rezvani Jalal, **M.T.H. Beheshti**, "The Control of Brusselator System in Presence of Interval Uncertainty by Sliding Mode Method", in *Proc. ICSCCW IEEE Conference, Cyprus 2009*.
51. F. Jamshi, M.G. Moghadam, **M.T.H. Beheshti**, M. Najafi, " Synthesis of Switching H_2 and H_∞ Output Feedback Controllers: A Fuzzy Supervisor Approach" in *Proc. American Control Conference*, 2009, pp 4278-4283
52. S.Saeedi, **M.T.H. Beheshti**, "Optimal Design of Rotating Sliding Surface for Sliding Mode Control", in *Proc IEEE ACC Control Conference*, St. Louis, MO, USA, pp 774-777, 2009.
53. M.G. Moghadam, F. Jamshidi, **M.T.H. Beheshti**, "The Multiobjective H_2/H_∞ Impulse-to-peak Output-Feedback Control via LMI Optimization" in *Proc. Advanced Computer Control*, ICACC 2009, pp 281-286.
54. F. Jamshidi, M.G. Moghadam, **M.T.H. Beheshti**, "An LMI Approach to Mixed H_2/H_∞ Synthesis via Dynamic Output-Feedback for Active Magnetic Bearing " in *Proc. Advanced Computer Control*, ICACC 2009, pp 225-230
55. M.G. Moghadam, F. Jamshidi, **M.T.H. Beheshti**, " Multiobjective Control via Dynamic Output-Feedback for Active Magnetic Bearing" in *Proc. of ICEE*, Iran 2009, pp 272-277
56. M.G. Moghadam, F. Jamshidi, **M.T.H. Beheshti**, "A Novel Approach to Multiobjective H_2/H_∞ Output-Feedback Control via LMI Optimization" in *Proc. of ICEE*, Iran 2009, PP 278-285.
57. A.Fakharian, F. Jamshidi, **M.T.H. Beheshti**, "Logic Based Switching H_2/H_{inf} Controller Design for Linear Singular Perturbation Systems: A Fuzzy Supervisor Approach", in *Proc. 8th IEEE International Conference on Control and Automation*, Xiamen, China, June 9-11, pp 1311-1315, 2010.
58. A.Fakharian, F. Jamshidi, **M.T.H. Beheshti**, "Logic Based Switching H_2/H_{inf} Controller Design: An Intelligent Supervisor Approach", in *Proc. 8th IEEE International Conference on Control and Automation*, Xiamen, China, June 9-11, pp 446-449, 2010.
59. Najmeh Daroogheh, Mohammad.R Jahed-Motlagh, and **M.T.H. Beheshti**, " Robust Adaptive

Control of Surge Instability in a Centrifugal Compressor with Variable Speed”, in *Proc. IEEE American Control Conference*, Baltimore Maryland, 2010, pp 5056-5061.

60. M. Miran Beygi, **M.T.H. Beheshti** “Model Predictive Control of Supply Chain Management with Information Cycles” in *Proc. 8th International conference on Management, Tehran. Iran 2010*, pp 1-15.
61. M.Miran Beygi, **M.T.H. Beheshti** “Energy Supply Chain Control Using Predictive Method in Large Scale Power Systems” 1st Annual Conference Management, Innovation and Entrepreneurship 16th and 17th February 2011-Shiraz,Iran
62. Z. Javidian, **M.T.H. Beheshti** “Multiapplication Smart Cards: Towards E-Commerce Service Developments Used in E-Government” 1st Computer and Electrical Conference, Neka Mazandaran, pp.1-8, 24-25 Feb. 2011
63. Z. Javidian, **M.T.H. Beheshti** “ prioritizing RFID technology factors in healthcare organizations using TOPSIS” Emergency Management and Management Sciences (ICEMMS), 2011.
64. M. Azimi, **M.T.H. Beheshti**, A.Badpa “ A New T-S Fuzzy observer Based controller for Nonlinear NCSs” ICCIA 2011, shiraz,
65. M. Azadegan, **M.T.H. Beheshti** “ Output Feedback Control of Networked control Systems with Random Time Delay” ICCIA 2011, shiraz,
66. M. Azadegan, **M.T.H. Beheshti** “ Adaptive Controller Design for NCS. Systems with Delay and Packet loss” ICCIA 2011, shiraz,

Journal/Conference Referee

- IEEE Transaction on Automatic Control
- Journal of Systems & Control Letters.
- American Control Conference.
- Journal of Esteghlal-Isfahan University of Technology, Iran.
- Journal of Shahed, University of Shahed, Tehran, Iran
- Journal of Modarres, Tarbiat Modarres University, Tehran, Iran.
- Iranian Conference on Electrical Engineering, Tehran-Iran.

Honors and Awards

- 1987-1988 Assistantship, Wichita State University (Master Program)
- 1988-1992 Assistantship, Wichita State University (Ph.D. Program)

Affiliations

IEEE Student member 1989-1992

IEEE Member 1996-Now

Control Engineering and Instrumentation Society, *Board Member* 1996-1998. (IFAC member Society)

Iranian Energy National Committee, member 1996-2000 (WEC member)

References

1. Prof. M. Edwin Sawan, Ph.D., P.E

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CURRICULUM VITAE

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EDUCATION

PhD Control 1987-1992

Electrical Engineering Department, **Wichita State University**, Wichita, Kansas USA.

Dissertation: Controller Design for Discrete Time Singularly Perturbed Systems

MS Control 1984-1987

Electrical Engineering Department, **Wichita State University**, Wichita, Kansas, USA.

Directed Study: Optimal Observer-Based Controller Design for Singularly Perturbed Systems.

BS Electrical Engineering 1979-1984

Electrical Engineering Department, **University of Nebraska**, Lincoln, Nebraska, USA

WORK EXPERIENCE

1. **Kent State University (Visiting Scholar):** Research in modeling and robust optimal control of dynamical systems. Ashtabula, Ohio 2008- 2009

2. **Tarbiat Modarres University (TMU),** Tehran- Iran 1995-Present

Associate Professor of School of Engineering, EE Department, Control Group

Responsibilities:

- Teaching graduate level courses
- Director of Control and Communication Network Lab (CCNL)
- Directing Ph.D. and MS student dissertations and thesis.
- Graduate coordinator and the **head of control group.** (1996-1999)
- **Head of electrical engineering department** (1999-2001)
- **Head of IT group.** (2005)
- International and Public Relations Chair in 16th Iranian Conference on Electrical Engineering.

3. **Iran Telecom Research Center,** Tehran, Iran 2001-2004

Director of International Affairs and Education Center

Note: TMU is a strictly post graduate school

4. **Invited Lecturer**

Isfahan University of Technology, Fall-1994

Amir-Kabir University of Technology, Fall-1996, spring-1996, Fall-1997, spring-1998

University of Tabriz, Spring-1997

Azad University, Najaf-Abad Campus, Isfahan, Iran, 1993-1995

Azad University - Post-graduate Campus, Tehran Iran 1998-Now.

TEACHING EXPERIENCE

I) Graduate Courses Taught (Electrical Engineering)

Modern Control Theory
Discrete-Time Control Systems
Optimal Control Theory
Random Variables and Random Processes
Multivariable Control Systems
Singular Perturbation Control Theory
Robust Control Systems
Adaptive Control Systems
Computer Networks Control
Traffic Control of Computer Networks
Performance Evolution of Computer Networks

II) Undergraduate Courses Taught

Computer Programming (FORTRAN) (*Wichita State University, Wichita, KS, USA*)
Electrical Circuits (I) (*Wichita State University, Wichita, KS, USA*)
Electrical Circuits (II) (*Malik-Ashtar University, Shahinshahr, Isfahan, Iran*)
Engineering Mathematics (*Imam-Ali University, Tehran, Iran*)
Signals and Systems (*Malik-Ashtar University, Shahinshahr, Isfahan, Iran*)
Classical Control Systems (*Amirkabir University, Tehran Iran*)

III) Lab Instructor

Electrical Circuit Lab (*Wichita State University, Wichita, KS, USA*)
Information Processing Lab (*Wichita State University, Wichita, KS, USA*)
Control System Lab (*Malik-Ashtar University, Shahinshahr, Isfahan, Iran*)

ADVISING ACTIVITIES

Master Thesis Supervised: 62⁺ students
Ph.D. Dissertation Supervised: 6 students
Master Students (Currently Supervising): 5 students
Ph.D. Dissertation (Currently Supervising): 5 students

FUNDED RESEARCH

- 1. Iranian Telecommunication Research Center (ITRC), Tehran, Iran**
Title: "Structural design of interfaces for the ATM-switching networks", 1997-1998
Position: Project Supervisor
- 2. CCAC Center, University of Tarbiat Modares, Tehran, Iran**
Title: "Design of a computer control system", 1997-1998
Position: Project Assistant Supervisor

3. Hydraulic Company of Iran, Tehran, Iran

Title: "Design of PLC control for water treatment of a sugar plant factory", 1996-1997

Position: Project Supervisor

4. ITRC, Tehran, Iran

Title: "Modeling and analysis of ATM switching networks", 1998-1999

Position: Project Supervisor

5. ITRC, Tehran, Iran

Title: "Standardization of ATM component", 1998-1999

Position: Project Supervisor

6. ITRC, Tehran, Iran

Title: "Real-time traffic descriptor estimation of voice and data for ATM networks", 2000-2001

Position: Project Supervisor

7. ITRC, Tehran, Iran

Title: "Software design and simulation of IP-MPLS switching networks", 2002-2003

Position: Project Supervisor

8. SBDC, Tehran, Iran

Title: "Information security center based On world standard", 2003

Position: Project Supervisor

9. ITRC, Tehran, Iran

Title: "Engineering export policies & guidelines for competition in the international ICT market", 2006-2007

Position: Project Supervisor

10. TMU, Tehran, Iran *Title:* "E-learning Master's Program Development", 2007- 2008

Position: Project Supervisor and Consultant

PUBLICATIONS

International Journal Papers

1. Mir Mohsen Pedram, Hossein Seifi, **M.T.H. Beheshti**, Shahrokh Farhangi, "Position Control of an Induction Motor Using 2nd Order Sliding Mode Controller and Improving the Response by Fuzzy Approach", *Journal of Amir-Kabir*, Vol. 51, Year 13, ,pp. 426-438, Summer 1992.
2. **M.T.H. Beheshti**, S. Hatami, B. Ghanbari "A Fuzzy Controller Design for ATM Network Traffic", *Int'l Journal of Communication Engineering (Iran Telecom Research Center)*, No.

- 2, pp. 71-78, Winter 2002.
3. S. Ganjefar, H.R. Momeni, F.J.Sharifi, **M.T.H. Beheshti**, "Teleportation Control System Using Wave Variable and Smith Predictor Combination with Variable Time Delay Prediction", *Engineering Journal of Tarbiat Modares University*, No. 13 , pp. 73-83, 2003.
 4. **M.T.H. Beheshti**, M.H. Miran Beygi, "A Comparison Study of Fixed and Moving-Block Signaling in Rapid Transit Railways", *Engineering Journal of Tarbiat Modares University*, No. 13, pp. 104-112, 2003.
 5. **M.T.H. Beheshti**, S.M. Nematollahzadeh, "Design of Active Suspension Control Using Singular Perturbation Theory", *Iranian J. Science & Technology, Transaction B*, Vol. 27, No. B4, pp 691-700, 2003.
 6. **M.T.H. Beheshti**, A. Ahvazi, "Nonlinear H_{∞} Controller Design for Position Control of Satellite", *Engineering Journal of Tarbiat Modares University*, Special Issue, Electrical Engineering Papers, pp. 1-20, Summer 2004.
 7. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, "Robust Regulation of a Class of Nonlinear Systems Using Singular Perturbation Approach" , *Journal of Amir-Kabir*, No 60, Year 15, pp. 29-37, Winter 2005.
 8. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, H.R. Momeni"Robust Regulation of a Flexible Joint Robot Manipulator Using Dynamic Separation", *Engineering Journal of MashhadUniversity*, No 2, Year 17, pp. 49-64, 2005,.
 9. A.Fakharian , **M.T.H. Beheshti**, M.Najafi, "Adomian Decomposition Method Approach for Solving Riccati Differential Equation", *WSEAS Transaction on Signal Processing*, Vol. 2, pp732-737, May 2006,
 10. A. Nejati, M. Farhudi, **M.T.H. Beheshti**, "Stability Robustness Design Power System Using H_{∞} Control Theory" , *Quarterly Electrical Engineering Journal of Majlasi*, Vol. 1, pp. 35-41, Summer 2007.
 11. M. Torkamandi, **M.T.H. Beheshti** "Design of Adaptive Predictive Congestion Controller Based on Active Queue Management in TCP/IP Routers", *Journal of Faculty of Engineering (Tehran University)*, Vol. 107, pp. 587-596, Fall 2007,
 12. A. Fakharian, **M.T.H. Beheshti** "Solving Linear and Nonlinear Control Problem Using Modified Adomian Decomposition Method", *Journal of Computer and Robotics*, Vol. 1, pp.1-8, Spring 2008.
 13. M.A.Bagheri, **M.T.H. Beheshti**, S. Alidusti. "Internet Banking Adoption: Extension of TAM", *Journal of Information Sciences and Technology, (Indexed in: LISA & SCOPUS)*, Vol. 24, No. 3, pp. 5-34, Spring 2009.
 14. R. Amjadi-fard, **M.T.H. Beheshti**, H. Khaluzadeh, K. Morris "Robust Hinf Control of an Experimental Inverted Pendulum Using Singular Perturbation Approach", *Journal of Control*, Vol. 3, No. 2, pp10-16, Summer 2009.


15. .M. Ashrafi, **M.T.H. Beheshti**, Sh. Shahidi, F. Ashrafi, "Application of Artificial Neural Network to Predict Graft Survival After Kidney Transplantation: Reports of 22 Years Follow up of 316 Patients in Isfahan", *Journal of Faculty of Medicine (Tehran University)*, Vol. 67, No. 5, pp. 353-359, Aug 2009.
16. M.A. Ardestani, **M.T.H. Beheshti**, "A Robust Active Queue Management for Delay Sensitive Internet Traffic", *Journal of Control*, Vol.3, No. 3, pp. 9-21, Fall 2009.
17. M.M. Asheghan, **M.T.H. Beheshti** "An LMI approach to robust synchronization of a class of chaotic systems with gain variations", *Chaos, Soliton and Fractals, Published by Elsevier*, Vol. 42, pp.1106-1111, 2009.
18. M.A. Ardestani, **M.T.H. Beheshti**, "A Robust Discrete -Time Controller of Delay Sensitive Applications, *IEICE Electronics Express*, Vol. 6 No. 22, pp. 1548-1555, Nov. 2009.
19. F. Jamshidi, A. Fakharian, **M.T.H. Beheshti**. "Fuzzy Supervisor Approach onLogic -Based Switching H2/Hinf", *Journal of Systems and ControlEngineering*, Vol. 224 Part 1, pp. 11-19, Sep. 2009.
20. A. Fakharian, F. Jamshidi, **M.T.H. Beheshti**, M.A. Ardestani"Switching H2/Hinf Control of Singularly Perturbed Systems", *Australian Journal of Basic Applied Sciences*, Vol.3(4) pp 4243-4252, 2009.
21. M.M. Asheghan, **M.T.H. Beheshti**. Robust Synchronization of a class of perturbed ChaoticSystem: An LMI approach. *Int. J. of Nonlinear Sciences & Numerical Simulations*, Vol. 10, pp.1345-1353, 2009.
22. A.Fakharian, F. Jamshidi, **M.T.H. Beheshti**, "Logic Based Switching H2/Hinf Control of Linear Singular Perturbation Systems : A Fuzzy Supervisor Approach", *Journal of control*, Vol. 3 No. 3, pp. 64-72, Fall 2009.
23. V. Nekoukar, **M.T.H. Beheshti**, "A Local Linear Radial Basis Function Neural Network for Financial Time-Series Forecasting", *Journal of Applied Intelligence, Published by Springer*, Vol. 33, No. 3, pp.352-356, Dec 2010.
24. A. Fakharian, **M.T.H. Beheshti**, A. Davari, "Solving the Hamilton -Jacobi-Bellman Equation Using Adomian Decomposition Method", *International Journal of Computer Mathematics, Published by Taylor & Francis*, Vol. 87, No. 12, pp2769-2785, Oct. 2010.
25. S.S. Delshad, **M.T.H. Beheshti** " Comments on: Linear Observer Based Projective Synchronization in Delay Rosslea System Dibakar Ghosh,Papri Saha, A.Roy Chowdhury", Commun in Nonlinear Sci and Numer Simulat, Vol15, Issue 12, pp 4230-4232, 2010
26. R. Amjadi-fard, **M.T.H. Beheshti**, "Robust Disturbance Attenuation of a Class of Nonlinear Singularly Perturbed Systems", *Intenational Journal of Innovative Computing*

27. S.S. Delshad, M.M. Asheghan, **M.T.H. Beheshti** "Robust Stabilization of Fractional-Order Systems with Interval Uncertainties via Fractional-Order Controllers" *Advances in Difference Equation*, Hindawi Publishing Corporation, pp 1-15 ,Vol. 2010
28. M.M. Asheghan, **M.T.H. Beheshti**, M.S. Tavazoei" Robust Synchronization of perturbed Chens fractional-order Chaotic Systems " *Commun Nonlinear Sci Numer simulat* 2011, No 16, pp 1044-1051.
29. S.S. Delshad, **M.T.H. Beheshti** "Comment on: "Chaos in the Fractional Order Unified System and its Synchronization" *Journal of the Franklin Institute* 345 (2008) 392-401", 347, 2010, 1795-1796.
30. F. Jamshidi, M.G. Moghadam, **M.T.H. Beheshti**" Synthesis of a Logic-Based Switching H_2/H_∞ Controllers: An Intelligent Supervisor Approach" *ICIC Express Letters*, vol. 4, No. 1, 2010, pp 7-12
31. M.M. Asheghan, **M.T.H. Beheshti**, M.S. Tavazoei "Comments on "Synchronization and anti-synchronization of new uncertain fractional-order modified unified chaotic systems via novel active pinning control" *Commun Nonlinear Sci Numer simulate* 16(2011) pp 2656-2657.
32. S.S. Delshad, M.M Asheghan, **M.T.H. Beheshti**, "Synchronization of N-Coupled Incommensurate Fractional-Order Chaotic Systems with Ring Connection" *Communications in Nonlinear Science and Numerical Simulations*, No 16 (2011) 3815-3824.
33. M.G. Moghadam, **M.T.H. Beheshti**, " A New Approach to H_2 /H_∞ Dynamic Output Feedback Control for Singularly Perturbed Systems via LMI Optimization" *Journal of Communication and Computer*, No 8 (2011) pp 71-78.
34. A. Abdolmasoumi, S.S. Delshad, **M.T.H. Beheshti** "Congestion Control of TCP-WESTWOOD Using AQM-PI Controller" *International Journal of Computer Network & Communications* Vol.3, No2, March 2011, pp 180-195
35. M.G. Moghadam, **M.T.H. Beheshti**"On Output Feedback Multiobjective Control for Singularly Perturbed Systems" *Hindawi Publishing Corporation Mathematical Problems in Engineering*, 2011, pp 1-28
36. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah" Robust stabilization for a class of Nonlinear singularly perturbed" *ASME journal of Dynamic Systems, Measurement, and*, September 2010, vol 133, No 51004, pp 1-6.
37. M.M. Asheghan, J. Miguez **M.T.H. Beheshti**, M.S. Tavazoei "Robust outer synchronization between two complex network with" *Chaos* 2011, vol 21, N 033121, pp 1-12.

Refereed Conference Papers

1. **M.T.H. Beheshti**, M.E. Sawan, "On the Robustness of Observer-Based Controller", in *Proc. ACC 1987*, U.S.A.
2. **M.T.H. Beheshti**, M. Jaafari, "Loop Shaping and High Frequency Compensation Using Singular Perturbation Theory", in *Proc. 6th ICEE*, Tehran, Iran, pp 109-114, 1998.
3. **M.T.H. Beheshti**, M.E. Sawan, "A Note on Discretization of Continuous-Time Standard and Non-Standard Singularly Perturbed Systems", in *Proc 33rd IEEE Conf. Circuits and Systems*, Calgary, Canada, pp 527-529, 1990.
4. **M.T.H. Beheshti**, M.E. Sawan, "Feedback Control of Nonstandard Discrete-Time Singularly Perturbed Systems", in *Proc 31st IEEE Conf. Decision and Control*, U.S.A, 1992.
5. **M.T.H. Beheshti**, M.E. Sawan, "Observer Based Controller Design for Nonstandard Singularly Perturbed Systems", in *Proc 35th IEEE Conf. Circuits and Systems*, 1992, U.S.A.
6. **M.T.H. Beheshti**, A Khalili, "An Adaptive Fuzzy Logic Algorithm for Solving Inverse Kinematics of Redundant Robots", in *Proc. IASTED Int'l., Conference on Intelligent Systems and Control*, pp 185-188, Halifax, Canada 1998.
7. **M.T.H. Beheshti**, M.H. Miran Beygi, "Fixed Block vs. Moving Block Signaling in a Rapid Transit Railway", in *Proc. 7th ICEE*, Tehran, Iran, pp 121-130, 1999.
8. S. Hosseinnia, V. Tahani, **M.T.H. Beheshti**, "Non Liner H Speed Control of a Series Dc Motor ", in *Proc. 7th ICEE*, Tehran, Iran, pp 35-43, 1999.
9. **M.T.H. Beheshti**, A. Khalili, "Obstacle Avoidance for Kinematic ally Redundant Robots Using Adaptive Fuzzy Logic (AFL) Algorithm", in *Proc. ACC 1999*, San Diego, CA,P.P 27-34 1999
10. **M.T.H. Beheshti**, S. Gangehfar, H. Momeni, "Robust Stability Analysis of Singularly Perturbed Systems", *Proceedings of 7th ICEE*, May 1999, Tehran, Iran, pp 25-33
11. **M.T.H. Beheshti**, A. Khalili, "Distribution Automation in Electrical Networks", *Proceedings of 2nd National Energy Congress*, May 1999, Tehran, Iran pp 1279-1289.
12. **M.T.H. Beheshti** R.Amjadi-fard ,A. Khalozadeh " An Optimal H-inf Controller for Two- Time Scale Systems" in *Proc. 8th ICEE*, Isfahan, Iran, pp 1-7, 2000.
13. .M.R. Haghifam, H.R. Momeni, **M.T.H. Beheshti**, " Electrical Distribution Networks Automations" in *Proc. 2rd National Energy Congress*, Iran, pp 1279-1289, 2000.]
14. **M.T.H. Beheshti**, S.M. Nematollahzadeh, "Controller Design for Active Suspension System

- Using Singular Perturbation Theory", in *Proc. 9th ICEE*, Tehran, Iran, pp 1-8, 2001.
15. **M.T.H. Beheshti**, A. Khalili, "Distribution Automation Using Distribution Line Carrier (DLC) Systems", in *Proc. 3rd National Energy Congress*, Tehran, Iran pp 706-719, 2001.
 16. **M.T.H. Beheshti**, S.M. Nematollahzadeh, "Design of Active Suspension Control Using Singular Perturbation Theory" *IFAC 2002*, Barcelonan, Spain, 2002.
 17. M.M. Rezaee, **M.T.H. Beheshti**, "A New Hybrid Boiler Master Controller", in *Proc. ACC 2002*, pp 2070-2075, Canada, 2002.
 18. **M.T.H. Beheshti**, A. Khalili, "Connection Admission Control (CAC) Based on Fuzzy Adaptive Algorithm ", in *Proc. 10th ICEE*, Tabriz, Iran, pp 32-39, 2002.
 19. **M.T.H. Beheshti**, A. Ahvazi, " Nonlinear H_yController Design for Control Position of a Satellite", in *Proc. 10th ICEE*, Tabriz, Iran, pp 401-410, 2002.
 20. **M.T.H. Beheshti**, M.M. Rezaee, "A New Hybrid Boiler Master Controller", in *Proc. 10th ICEE*, Tabriz, Iran pp 563-569, 2002.
 21. M.M. Rezaee, **M.T.H. Beheshti**, "Boiler Master Controller by a Neural Self-Tuned PID", in *Proc. 7th National Iranian Chemical Engineering Congress*, University of Tehran, Tehran, Iran, pp 155-163, 2002.
 22. M.M. Rezaee, **M.T.H. Beheshti**, M. Rezaee, "Modeling and Neuron-Adaptive Control of Steam Pressure in Drummed Boilers", in *Proc. 7th National Iranian Chemical Engineering Congress*, University of Tehran, Tehran, Iran, pp 148-154, 2002.
 23. **M.T.H. Beheshti**, M.M. Rezaee, "A New Hybrid Boiler Master Controller" in *Proc. of ACC Conference*, May 2002, Anchorage-Alaska 563-569
 24. **M.T.H. Beheshti**, A Khalili, B Ghanbari, " An Optimized Adaptive Fuzzy Inverse Kinematics Solution for Redundant Manipulators", in *Proc. IEEE Conf. Intelligent Control*, Huston Texas, pp. 924-930, 2003.
 25. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, "Robust Regulation of a Class of Nonlinear System Using Singular Perturbation Approach", in *Proc. ECC 2003*, Cambridge UK, pp 11-13 2003
 26. G Etemadinezhad, **M.T.H. Beheshti**, "Congestion Control in Differentiated Services Networks: Fuzzy PID Approach", in *Proc. Australian Telecommunication Networks and Applications*, Melbourne, Australia, pp 81-85. 2003
 27. S. Gangehfar, H. Momeni, F.J. Sharifi . **M.T.H. Beheshti** " Prediction of Delay Time for Teleoperation Systems in Augmented Wave Variables and Smith Predictor " in *Proc. ACC 2003*, 11th Int Conf. on Advanced Robotics, Coimbra, Portugal ,pp 520-525.2003

28. A Akbarzadeh, **M.T.H. Beheshti**, "Auto Pilot Design for Roll Channel of a Surface to Air Missile Using H_∞ with Fuzzy Gain Scheduling", in *Proc. 4th Fuzzy Sets and Applications Conference*, Univ. of Mazandaran, Mazandaran Iran, pp 23-29, 2003.
29. **M.T.H. Beheshti**, MMonemi, S Saeedi, "Robust Congestion Control Design for AQM in Differentiated Services Communication Networks", in *Proc. IST 2003*, Isfahan Iran, pp 81-85, 2003.
30. **M.T.H. Beheshti**, A Khalili, " TCP Congestion Control Using an Adaptive Algorithm", in *Proc. IST 2003*, Isfahan Iran, pp 509-513, 2003.
31. S. Ganjefar, H.R. Momeni, F.J. Sharifi **M.T.H. Beheshti**, "Prediction of Delay Time for Teleoperation Systems in Augmented Wave Variables and Smith Predictor", in *Proc. 11th ICEE*, Tehran, Iran, pp 149-157, 2003.
32. S.M.A. Beheshti, **M.T.H. Beheshti**, "Modeling and Controlling of Nomadic Serve System Hinf", in *Proc. 6th Manufacturing and Production Engineering*, Tehran, Iran, pp 1-11, 2004.
33. G. Etemadinezhad, **M.T.H. Beheshti**, " An Intelligence Approach to Congestion Control in Differentiated Services Networks ", in *Proc. 12th ICEE*, Mashhad, Iran, pp 125-130, 2004.
34. R. Amjadi-fard, **M.T.H. Beheshti**, J. Yazdanpanah, H.R. Momeni, "Robust Regulation of Synchronous Generator Parameters Using Singular Perturbation Approach", in *Proc. III Int'l Conf. System Identification and Control Problems*, Moscow, Russia, pp 1288-1294, 2004.
35. Mehrjerdi, **M.T.H. Beheshti**, k. Lucas, "Robust Control Theoretic Approach and Dynamic Analysis of Congested Multi-Router TCP Networks", in *Proc. IST 2005*, Shiraz, Iran, pp 505-511, 2005.
36. S.Saeedi, **M.T.H. Beheshti**, M. Monemi, "Active Queue Management (AQM) for TCP/IP Networks Using Discrete Time Sliding Mode Control (DSMC) ", in *Proc IEEE Conf. Control Application*, Toronto, Canada, pp 727-730, 2005.
37. A. Fakharian, **M.T.H. Beheshti**, M. Najafi, "A New Algorithm for Solving Riccati Equation Using Adomian Decomposition Method ", in *Proc. 9th WSEAS International Conference on Applied Mathematics*, Istanbul, Turkey, pp 74-77, 2006. .
38. N. Taherkhani, M.M. Sepehri, **M.T.H. Beheshti**, "A Framework to Determine The Priorities of Improvement Factors of Customer Satisfaction in Companies", in *Proc. International Marketing Management Conference*, Tehran, Iran, 2006.p.p 1-12
39. M. Ashrafi, **M.T.H. Beheshti**, " Radio Frequency Identification, Applications & Challenges ", *1st RFID International Conference*, Tehran, Iran, 2007.
40. A. Fakharian, **M.T.H. Beheshti**, "  A New Algorithm Based On The Adomian Decomposition Method For Solving Riccati Equation in Linear Optimal Control", in *Proc. 15th ICEE*, Tehran, Iran, pp 21-26, 2007.

41. A.H Abolmasoumi, **M.T.H. Beheshti**, S. Jalili "CongestionControl Of Computer Networks Based On TCP-Westwood Using AQM-PI Controller ", in *Proc. 12th International Conference of Computer Society*, Tehran, Iran pp 764-771, 2007.
42. G. Habibi, A. Masihi, **M.T.H. Beheshti**, " Binary Integer Programming Model Of Paint Robot Path Planning ", in *Proc. 33rd IEEE Conf. Industrial Electronics Society*, Taipei, Taiwan, pp 2841-2845, 2007.
43. G. Habibi, **M.T.H. Beheshti**, " Applied Fixed-Order H_{∞} Controller Design For Flexible Transmission System ", in *Proc. 33rd IEEE Conf. Industrial Electronics Society*, Taipei, Taiwan, pp 510-515, 2007.
44. M. Farhodi, , **M.T.H. Beheshti**, "A Case Study of the Multiobjective H_2 / H_{∞} Control via Finite Dimensional Youla Parameterization and LMI Optimization", in *Proc. 33rd IEEE Conf. Industrial Electronics Society*, Taipei, Taiwan, pp 493-497, 2007.
45. A.Shoja-Sefat, **M.T.H. Beheshti**, H.Moradi "A New Statistical Model for Call Holding Time Simulation In The Telephony Networks", in *Proc. IEEE Conf. Signal Processing And Communications*, Dubai, U.A.E, pp 1359-1362, 2007.
46. F. Jamshidi, **M.T.H. Beheshti**, M.G. Moghadam, R. Vahidnia, M. Rezaeemanesh " A new Approach for Fuzzy Supervisor of H_2/H_{∞} Controllers "Proceedings of the 2nd joint Congress on Fuzzy and Intelligent Systems of Iran,2008.
47. A. Pourmirza, A.Wallstrom, **M.T.H. Beheshti**, " Adoption of Internet Banking Services by Iranian Customers': An Empirical Qualitative Investigation", *The First eCity Conference*, Tehran, Iran, 2008.
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Journal/Conference Referee

- IEEE Transaction on Automatic Control
- Journal of Systems & Control Letters.
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- Journal of Esteghlal-Isfahan University of Technology, Iran.
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