

# CURRICULUM VITÆ

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## JELEL EZZINE

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## EDUCATIONAL BACKGROUND

- **Habilitation Universitaire, 2000**, Ecole Nationale d'Ingénieurs de Tunis, Tunisia.
- **Ph.D., Electrical Engineering, 1989**, Georgia Institute of Technology, Atlanta, GA, USA.
- **M.S., Electrical Engineering, 1985**, Univ. of Alabama in Huntsville, Huntsville, AL, USA.
- **B.S., Electromechanical Engineering, 1982**, Ecole Nationale d'Ingénieurs de Tunis, Tunisia.

## CURRENT FIELDS OF INTEREST

- Theory and Application of Nonlinear Control and Neuro-fuzzy Systems,
- Robust Control & Stabilization of Random Dynamical Systems,
- Computational Intelligence as applied to NP-Hard problems,
- Finite Alphabet Adaptive Filtering and DSP as applied to digital communication,
- Fault Detection & Isolation,
- Application of DSP & Systems and Control Theory.

## HONORS AND AWARDS

- *Invited paper*, IEEE Int. Conf. on Communication, Computer, and Power (IEEE-ICCCP'01), Muscat, **Sultanate of Oman**, (February 2001).
- *IEEE Certificate of Appreciation & Recognition*, IEEE Region 8 Meeting, Cairo, **Egypt**, (Oct. 2000).
- *Invited speaker*, Laboratoire d'Analyse et d'Architecture des Systems (LAAS), Centre Nationale de la Recherche Scientifique (CNRS), Toulouse, **France**, (January 2000).
- *Invited speaker*, Hirota Laboratory, Dept. of Computational Intelligence and Systems Science, Interdisciplinary Graduate School of Science and Engineering, T.I.T., Tokyo, **Japan**, (July 1999).
- *Invited speaker*, The Institute of Systems Science, The Chinese Academy of Sciences, Beijing, **China**, (July 1999).
- *Invited distinguished speaker* at the Advanced Controls Group, Distinguished Lecturer Program, the Automation and Robotics Research Institute (ARRI), UTA, Texas, **USA**, (April, 1998).
- *Invited speaker* at the Ingenieria Electronica, Control Automatico, of the Centro de Investigacion y de Estudios Avanzados del I.P.N. (CINVESTAV), Mexico City, **Mexico**, (June, 1998).

- *Visiting Research Professor*, Dartmouth College, Hanover, NH, USA, July 1998-June 1999.
- *Visiting Research Professor*, Automation and Robotics Research Institute (ARRI), UTA, Arlington, Texas, USA, March 1998-June 1998.
- *Jemison Institute Fellow*, Dartmouth College, Hanover, NH, USA, July 1998-August 1998.
- *Technology Transfer Program Fellow*, Tunisian Ministry of Higher Education, March 1998-June 1998.
- *Invited Visiting Scholar*, School of Electrical Engineering, Georgia Institute of Technology, Atlanta, GA, USA, July 1994.
- Member of *Eta Kappa Nu*, *Pi Mu Epsilon*, and *Gamma Beta Phi*.
- Distinguished to excellent academic performances during 1989-94 academic years (Saudi Arabia).
- Tunisian Government scholarship for graduate education (1982-84 and 1985-89).
- **IEEE Senior Member**.
- **IEEE CEB Associate Editor**.
- **Who's Who in the World**, the Millennium Edition.
- **Who's Who in Science and Engineering**.
- Member of the **Ministerial Committee** for the elaboration and design of Technopole El-Manar, Univ. El-Manar Tunis.

#### PATENTS

- Disturbance-Accommodating Neurocontroller (DANC), Submitted to the U.S. Patent and Trademark Office, Ref.: jc541 U.S. PTO 60/141345, 06/28/99.

#### PROFESSIONAL SOCIETIES

- The Institute of Electrical and Electronics Engineering (IEEE)
- IEEE Control Systems Society
- IEEE Systems Man and Cybernetics Society
- IEEE Circuits and Systems Society
- The International Federation of Automatic Control (IFAC).
- L' Association des Spécialistes Electriciens de Tunisie (ASET).
- The Balaton Group (INRIC)

#### LANGUAGES

English (Fluent), French (Fluent), and Arabic (Fluent).

#### EXTRACURRICULAR ACTIVITIES

- General Secretary (1996-99) of the *Association des Spécialistes Electriciens de Tunisie* (ASET).
- Founding Member of *Nabeul-21*.

- Founder and President (1983-85), of the *International Student Organization* at the Univ. of Alabama in Huntsville.
- Founder and General Secretary (1979-82), then President (1996-98) of the *Tunisian Young Scientists Club* in Nabeul.
- Represented the *Tunisian Young Scientists Association* in two international conferences for young scientists and two international astronomical camps for amateur astronomers.

## REFERENCES

### 1. **Dr. Abraham H. Haddad,**

Henry and Isabelle Dever Professor,  
Director, Center for Dynamic Systems and Control,  
Dept. of Electrical Engineering and Computer Science,  
Northwestern University,  
Evanston, IL 60208-3118, U.S.A.  
(312)-491-3641  
ahaddad@eecs.nwu.edu

### 2 **Dr. Frank Lewis,** IEEE Fellow,

Professor, Moncrief-O'Donnell Chair,  
Automation & Robotics Research Institute,  
The University of Texas at Arlington,  
7300 Jack Newell Blvd. S.,  
Fortworth, TX 76118, U.S.A.  
(817)-794-5972  
flewis@controls.uta.edu

### 3 **Dr. James V. Herod,**

Professor Emeritus,  
School of Mathematics,  
Georgia Institute of Technology,  
Atlanta, Georgia 30332-0250, U.S.A.  
(404)-894-4920  
jherod@mail.tds.net

### 4 **Dr. Meriem Jaidane,**

Professor,  
L.S.Télécom, ENIT  
Campus Universitaire,  
BP 37, Le Belvédère.  
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## EMPLOYMENT HISTORY

### September 1995-Present

- Maître Assistant at the Electrical Engineering Department, ENIT

### July 1998-June 1999

- Visiting Research Professor at Dartmouth College. Hanover, USA.

### July 1998-August 1998

- Fellow at the Jemison Institute, Dartmouth College, USA. Initiated a Systems Theoretic research work concerning Indicators of Sustainable Development.

### March 1998-June 1998

- Visiting Research Professor at the Automation and Robotics Research Institute (ARRI), The University of Texas at Arlington, Texas, USA. Developed new disturbance accommodating controllers using Neural Nets.

### September 1989-September 1995

- Assistant Professor at the Systems Engineering Department, King Fahd University of Petroleum and Minerals.
- Invited Visiting Scholar, July 1994, EPRI Research Project, School of Electrical Engineering, Georgia Institute of Technology, USA.
- Acting Chairman, Summer 1991, KFUPM.

### Fall 1985-Summer 1989

- Graduate Research Assistant, School of Electrical Engineering, Georgia Institute of Technology, Atlanta, GA, USA.
- Ph.D. Thesis Research: Studied and developed new techniques for the analysis, control and stabilization of random dynamical systems.
- Participated in the analysis and design of the common module Thermal Control System (TCS) of the space station (NASA Project).

### Spring 1982-Summer 1985

- Graduate Research & Teaching Assistant, Department of Electrical and Computer Engineering, Univ. of Alabama in Huntsville, Huntsville, AL, USA.
- Master Thesis Research: Studied the parameter sensitivity of discretized systems.
- U. S. Army Sponsored Research: Compared and evaluated digital control techniques, control algorithms, and microcontrollers performance for Missile Guidance Controllers.
- Teaching assistant for senior level course: "Operational Methods in Engineering."
- Teaching assistant for senior level electronics laboratory.

### Summer 1981

- Training at Dietz Computer System, West Germany. Designed and realized a microprogrammable microprocessor/computer.

### Summer 1980

- Training at Plastic Omnium, France. Developed a CAD package for injection molds design.

### FUNDED RESEARCH PROJECTS

1. Full Automation of the Phosphoric Acid Production System of the GCT (\$ 350,000 + equipment).
2. Interior Point Optimization Methods for Linear and Nonlinear Programming (\$ 46,720).
3. On Singularly Perturbed Jump Linear Control Systems (\$ 30,072).
4. Disturbance Accommodating Control using Neural Nets (\$ 16,200).
5. A Systems Theoretic Approach to Indicators of Sustainable Development (\$ 11,000).

### PEER REVIEWER

1. IEEE Transactions on Automatic Control.
2. The French Academy of Science.
3. International Journal of Robust and Nonlinear Control.
4. International Journal of Control.
5. International Journal of Systems Science.
6. Journal of the Operational Research Society (JORS).
7. The Arabian Journal for Science and Engineering.
8. MED'01,
9. SSD'01,
10. CDCs (several editions),
11. ACCs (several editions),
12. "Flexible Manufacturing Systems: Recent Developments," A. Raouf & M. Ben Daya (Eds.), 1994.

### SEMINARS & CONFERENCES

#### Seminars

1. "My Ongoing Research: Many Questions and Few Answers!" January 2000, *Invited Speaker*, Laboratoire d'Analyse et d'Architecture des Systems (LAAS), CNRS, Toulouse, France.
2. "On Lyapunov Exponents and their Furstenberg-Kesten Bounds," July 1999, *Invited Speaker*, Hirota Laboratory, Dept. of Computational Intelligence and Systems Science, Interdisciplinary Graduate School of Science and Engineering, Tokyo Institute of Technology, Tokyo, Japan.

3. "On Almost Sure Stability of Hybrid Systems," July 1999, *Invited Speaker*, The Institute of Systems Science, The Chinese Academy of Sciences, Beijing, China.
4. "On Almost-Sure Stabilization of Discrete-Time Jump Parameter Systems: An LMI Approach," 1998, *Invited distinguished speaker at the Advanced Controls Group, Distinguished Lecturer Program*, the Automation and Robotics Research Institute (ARRI), UTA, Texas, U.S.A.
5. "On Lyapunov Spectrum Assignment for Hybrid Systems," 1998, *Invited speaker at the Ingenieria Electronica, Control Automatico*, of the Centro de Investigacion y de Estudios Avanzados del I.P.N. (CINVESTAV), Mexico City, Mexico.
6. "Stabilization of Hybrid Systems via Averaging," 1990, *Systems Engineering Graduate Seminar*, KFUPM, Saudi Arabia.
7. "Almost-Sure Stability of Random Dynamical Systems," 1990, *Invited lecture to the Mathematics Colloquium*, KFUPM, Saudi Arabia.
8. "Singularly Perturbed Nonlinear ODE's and Interior Point Optimization Algorithms," 1994, *Invited lecture to the Mathematics Optimization Seminars*, KFUPM, Saudi Arabia.
9. "On Singularly Perturbed Jump Linear Control Systems," 1995, *Systems Engineering Funded Research Project Presentation*, KFUPM, Saudi Arabia.

**Conferences:** As Scientific/Chairman and/or Organizing Member

1. IFAC Symposium on System Structure and Control, *SSSC'01*, Prague, Czech Republic, August 2001.
2. 9th IEEE Mediterranean Conference on Control and Automation, *MED'01*, Dubrovnik, Croatia, June 2001.
3. *SSD 2001*, Hammamet, Tunisia, March 2001.
4. Computational Engineering in Systems Application, *IMACS/IEEE Multiconference*, Tunisia, April 1998,
5. *IEEE TechCom'98*, Fort Worth, TX, USA, April 1998,
6. Les Deuxièmes Journées Francophones de Recherche Opérationnelle, *FRANCORO II*, Tunisia, April 1998,
7. La Méthodologie Bon Graph pour l'Etude des Systèmes Physiques, *ASET/ISET*, Tunisia, Mars 1997,
8. The 3rd Arab Aerospace Education Organisation Conference, Tunisia, July 1997,
9. L'Aide à la Décision en Environnement Incertain, *ASET/ISET*, Tunisia, Dec. 1996,
10. Le Traitement du Signal et de l'Image et ses Applications, *ASET/CNRS*, Tunisia, Mars 1996,
11. Le Deuxième Séminaire sur La Commande Robuste et ses Applications, *SCRA '95*, ASET, Dec. 1995.

**Attended Conferences**

1. *20th Balaton Group Meeting*, Csopak, Hungary, September 2001.

2. IFAC Symposium on System Structure and Control, *SSSC'01*, Prague, Czech Republic, August 2001 (speaker & Chair).
3. 9th IEEE Mediterranean Conference on Control and Automation, *MED'01*, Dubrovnik, Croatia, June 2001 (speaker & IPC).
4. *SSD 2001*, Hammamet, Tunisia, March 2001 (speaker & Chair).
5. *IEEE ICCCP 2001*, Muscat, Sultanate of Oman, Feb. 2001 (Invited paper).
6. *18th Balaton Group Meeting*, Csopak, Hungary, September 2000.
7. *IEEE ISCAS 2000*, Geneva, Switzerland, May 2000 (speaker).
8. *IFAC World Congress 1999*, Beijing, P.R. China, July 1999 (speaker).
9. *IEEE TechCom'98*, Fort Worth, TX, USA, April 1998 (Systems Track Chair).
10. *17th Balaton Group Meeting*, Csopak, Hungary, September 1998.
11. *The 3rd Arab Aerospace Education Organization Conference*, Sousse, Tunisia, July 1997,
12. *EFDAN '97, 2nd European Workshop on Fuzzy Decision Analysis and Neural Networks for Management, Planning and Optimization*, Dortmund, Germany, June 1997,
13. *ACHEMA '97*, Frankfurt, Germany, June 1997,
14. *AUTOMATION EUROPE 97*, Paris, France, January 1997,
15. *L'Aide à la Décision en Environnement Incertain*, ASET/ISET, Douz, Tunisia, Dec. 1996,
16. *16 émes journées tunisiennes d'électrotechnique et d'automatique*, Nabeul, Tunisia, Nov. 1996 (speaker).
17. *1996 Triennial World Congress*, International Federation of Automatic Control IFAC'96, San Francisco, CA, July 1996 (speaker).
18. *Ecole de printemps sur le traitement du signal et de l'image et ses applications*, Douz, Tunisia, Mars 1996.
19. *2éme Seminaire sur la commande robuste et ses applications*, SCRA'95, Nabeul, Tunisia, Dec. 1995 (speaker).
20. *15 émes journées tunisiennes d'électrotechnique et d'automatique*, Nabeul, Tunisia, Nov. 1995 (speaker).
21. *IEEE 15th ACC*, Seattle, WA, June 1995 (speaker).
22. *SIAM Conf. on Control and its Applications*, Minneapolis, Minnesota, September 1992 (speaker).
23. *14th IMACS World Congress*, Georgia Tech., Atlanta, Georgia, July 1994 (speaker).
24. *I.E. Series of Seminars on Practical Applications of Industrial Engineering*, Dhahran, Saudi Arabia, February 1992 (speaker).
25. *IEEE 11th ACC*, Chicago, IL, June 1992 (speaker).
26. *SIAM Conf. on Control and its Applications*, Minneapolis, Minnesota, September 1992 (speaker).
27. *33rd Midwest Symposium on Circuits and Systems*, The University of Calgary, Alberta, Canada, August 1990.

28. *23d Annual Conf. on Information Sciences and Systems*, The Johns Hopkins Univ., Baltimore, Maryland, March 1989 (speaker).
29. *IEEE 8th ACC*, Pittsburg, Pennsylvania, June 1989 (speaker).
30. *22nd Annual Conf. on Information Sciences and Systems*, Princeton Univ., Princeton, NJ, March 1988 (speaker).
31. *27th IEEE CDC*, Austin, Texas, Dec. 1988 (speaker).
32. *7th ACC*, Atlanta, GA, June 1988 (speaker).
33. *International Symposium on Singular Systems*, Atlanta, GA, December 1987.
34. *18th Southeastern Symposium on System Theory*, The Univ. of Tennessee, Knoxville, Tennessee, April 1986 (speaker).

#### **Professional Development Courses Attended**

1. Good Evaluation: A Critical Part of Good Teaching (1991),
2. The Dynamics of Teaching Excellence (1992).

## TEACHING & ADVISING

### Courses Taught

- Analyse des Systèmes Dynamiques (Grad/TU),
- Contrôle des Systèmes et Procédés (Grad/TU),
- Systèmes Complexes (Grad/TU),
- Diagnostic des Systèmes (Grad/TU),
- Optimal Control (Grad/KSA),
- Industrial Automation (Grad/KSA & TU),
- Operational Methods in Engineering (USA),
- Introduction to Systems Engineering (KSA),
- Advanced Computer Programming (KSA),
- Numerical Methods (KSA),
- Control System Design (plus Lab.) (KSA),
- Linear Control Systems (plus Lab.) (KSA),
- Computer Control Systems (plus Lab.) (KSA),
- Nonlinear Control (plus Lab.) (KSA),
- Large Scale Control Systems (plus Lab.) (TU),
- Simulation (TU),
- Control Systems Design using Matlab (TU),
- Modeling, Identification, and Estimation (TU),
- Senior Electronics Laboratory (USA).

### Courses Offered to the Industry

- Design, Analysis and Simulation of Industrial Control Systems (1990), (Instructor).
- Computer Aided Industrial Control System Design (1991), (Coordinator & Instructor).
- Applied Industrial Process Identification and Control: A Case Study (1992), (Coordinator & Instructor).
- Industrial Process Control Design and Tuning (1993), (Coordinator & Instructor).
- Advanced Distributed Process Control Concepts & Implementation (1994), (Coordinator & Instructor).
- Process Control: Basics & Applications (1995), (Instructor).

### Ph.D. and M.Sc. Theses

- As Advisor or Co-advisor:

1. "On Adaptive Filters in a Finite Alphabet Context," Hichem Besbes 1999 (Ph.D., G.E. Dept., ENIT, TU), Co-advisor,
  2. "On the Stabilization and Control of Large Scale Jump Parameter Systems," Youssr Ben Cheikh, (Ph.D., G.E. Dept., ENIT, TU), Advisor,
  3. "Disturbance-Accommodating Fuzzy Control (DAFC)," Mohamed E. Ben Khedher, (Ph.D., G.E. Dept., ENIT, TU), Advisor,
  4. "A Dynamical Long Term Energy Model for Tunisia," Ines Dridi, (DEA, G.I. Dept., ENIT, TU), Advisor,
  5. "A Dynamical Long Term Water Model for Tunisia," Walid Dhouibi, (DEA., G.I. Dept., ENIT, TU), Advisor,
  6. "Stabilité Robuste pour les Systèmes Échantillonnés à Paramètres Incertains Structurés," E. Aghali (M.Sc., G.E. Dept., ENIT, TU), Advisor,
  7. "Interpolation Fractale Appliquée à la Synthèse de la Parole," Farah Cherif, 1997 (M.Sc., GE Dept., ENIT, TU), Co-advisor,
  8. "On a Neural Network-Based Fault Detection Algorithm," Mufeed Al-Ghumgham, 1992 (M.Sc., SE Dept., KFUPM, KSA), Advisor.
- As Committee Member:
    1. "Mémorisation d'Information dans des Récurrences Unidimensionnelles et Multidimensionnelles," Samir Rouabhi 2000 (Ph.D., Systèmes Automatiques, INSA, FR.) Reviewer with Prof. M. Leon O. Chua and Prof. F. Lamnabhi-Lagarigue.
    2. "A Genetic Algorithm for Multi-Objective Knapsack Problems," Jouhaina Chaouachi, 1997 (M.Sc., ISG, TU),
    3. "Self Tuning Control of Nonlinear Systems: A Neural Nets Based Approach," F. Anjum, 1994 (M.Sc., SE Dept., KFUPM, KSA),
    4. "Modélisation d'un Signal Stationnaire par Modèle ARMA Réduit Adaptatif: Prédiction à Court-Terme de la Courbe de Charge Tunisienne," Monia Tourki, 1991 (M.Sc., GE Dept., ENIT, TU),
    5. "Design and Simulation of Digital Controllers Using Pipelined Architecture," Samir H. Al-Amer, 1990 (M.Sc., SE Dept., KFUPM, KSA).

### Senior Projects (PFE):

- As Advisor or Co-advisor:
  1. "Mise en Oeuvre d'un Système d'aide à la Décision Stratégique en Énergie: Cas de la Tunisie Horizon 2020," Ines Dridi, et Walid Dhouibi, 2001 (G.I., ENIT, TU),
  2. "Mise en Oeuvre d'un Système d'aide à la Décision Stratégique en Énergie Éolienne: Cas de la Tunisie Horizon 2020," Imen Safi, 2001 (G.I., ENIT, TU),
  3. "Mise en Oeuvre d'un Système d'aide à la Décision Stratégique en Énergie Électrique: Cas de la Tunisie Horizon 2020," Rim Kalai, 1999 (G.I., ENIT, TU), (Prix du meilleur PFE.),
  4. "Codage Fractal des Représentations Linéaires pour la Génération Cartographique des Cartes à Différentes Echelles," Mourad Menif, 1997 (G.E., ENIT, TU),
  5. "Interpolation Fractale Appliquée à la Synthèse de la Parole," Farah Cherif, 1996 (G.E., ENIT, TU),
  6. "Diagnostic des Pannes Des Moteurs à Courant Continu," Mediha Ajabi, et Razgallah Sonia, (G.E., ENIT, TU), 1995.

## PUBLICATIONS

### Theses

1. "On the Stabilization and Control of Hybrid Systems," Ph.D. Thesis, School of Electrical Engineering, Georgia Institute of Technology, Atlanta, GA, June 1989.
2. "Parameter-Perturbations in Digital Control Systems," M.S. Thesis, Department of Electrical and Computer Engineering, Univ. of Alabama in Huntsville, Huntsville, AL, June 1985.
3. "Identification des Caractéristiques d'une Cellule Photovoltaïque," Undergraduate Thesis, Département Génie Electrique, Ecole Nationale d'Ingénieurs de Tunis, Tunis, May 1982.
4. "Réalisation d'une Rampe de Puissance Ajustable," Memoire, Département Génie Electrique, Ecole Nationale d'Ingénieurs de Tunis, Tunis, May 1981.

### Reports

1. "Le Système de Production de l'Acide Phosphorique dans les Usines de Gabes du Groupe Chimique Tunisien," Rapport de Synthèse, IRSIT, TN, 1997.
2. "Interior Point Optimization Methods for Linear and Nonlinear Programming," Progress Reports **1** (1991), **2** (1992), **3** (1993), & Final Report SE/LINPROG/138 (1993).
3. "On Almost-Sure Exponential Stability of Discrete-Time Hybrid Systems," CCSE Technical report-CCSE-010 (1991).
4. "On the Numerical Computation of the Lyapunov Spectrum: A Stopping Rule," CCSE Technical report-CCSE-016 (1994).
5. "Stabilizability of Linear Time-Varying Systems," Qualifying Examination Report, GT, USA, 1987.
6. "Etude et Réalisation d'un Microprocesseur Microprogrammable," Training Report, Département Génie Electrique, Ecole Nationale d'Ingénieurs de Tunis, Tunis, September 1981.
7. "Conception Assistée par Ordinateur des Moules d'Injection," Training Report, Département Génie Mécanique, Ecole Nationale d'Ingénieurs de Tunis, Tunis, September 1980.

### Book Chapters and Theme Issues

1. Editor of the theme issue "*Control Theory and Its Applications*," The Arabian Journal for Science and Engineering, Vol. 18, No. 4, October 1993.
2. A chapter Titled : "Convergence in distribution and generalized stability of random dynamical systems," with J. Elton, in "*Diffusion Processes, and Related Problems in Analysis: Stochastic Flows*," Vol. II, Eds. M. Minsky, and V. Wihstutz, Birkauser Boston, Inc., 1990.

### Journal Papers

1. Kali R., and Ezzine J., "Mise en Oeuvre d'un Système d'Aide à la Décision Stratégique en Energie Electrique: Cas de la Tunisie Horizon 2020," to appear in *Revue Tunisienne de l'Energie* 2001.
2. Besbes, H., Jaidane, M., and Ezzine, J., "On Exact Convergence Results of Adaptif Filters: The Finite Alphabet Case," to appear, *Int. EURASIP Journal of Signal Processing*, 1999.
3. Ezzine, J., and D. Karvanoğlu, "On Almost-Sure Stabilization of Discrete-Time Jump Parameter Systems: an LMI Approach," *Int. J. Cont.*, Vol. 68, No. 5, pp. 1129-1146, 1997.

4. Ezzine, J. "An Asymptotically Exact Stopping Rule for the Numerical Computation of the Lyapunov Spectrum," *Chaos, Solitons, & Fractals*, Vol. 7, No. 8, pp. 1213-1225, August 1996.
5. Ezzine, J., Al-Sunni F., and Ksouri, M., "The Arab World," *IEEE Control Systems, Special Issue: A World View of Control Education*. Vol. 16, No. 2, pp.11-15, April 1996.
6. Ezzine, J., "Robust Stability Bounds for Sampled-Data Systems," *International Journal of Systems Science*, Vol. 26, No. 10, pp. 1951-1966, 1995.
7. Ezzine, J., and Haddad, A. H., "Error Bounds in the Averaging of Hybrid Systems," *IEEE Trans. Aut. Cont.*, Vol. 34, No. 11, pp. 1188-1191, November 1989.
8. Ezzine, J., and Haddad, A. H., "On the Controllability and Observability of Hybrid Systems," *Int. J. Cont.*, Vol. 49, No. 6, pp. 2045-2055, 1989.

### Conference Papers

1. Ben Cheikh, Y., and Ezzine, J., "Genetic Algorithm-Based Computation of the Lyapunov Exponent for Jump Parameter Systems," *Proc. SSSC'01*, Prague, Czech Republic, August 2001.
2. Ben Cheikh, Y., and Ezzine, J., "Hybrid LMI/Genetic Algorithms for the Stabilization of Discrete-Time Linear Jump Parameter Systems Using the Lyapunov Exponent," *Proc. MED'01*, Dubrovnik, Croatia, June 2001.
3. Ben Cheikh, Y., and Ezzine, J., "Upper Lyapunov Exponent Assignment of Randomly Samed Coupled Inverted Pendulums," *Proc. SSD'01*, Hammamet, Tunisia, 27-30 March 2001.
4. Ezzine, J., "Products of Random Matrices in Control and Signal Processing," *Proc. IEEE Int. Conf. on Communication, Computer, and Power (IEEE-ICCCP'01)*, Muscat, Sultanate of Oman, 12-14 February 2001 (**INVITED PAPER**).
5. Besbes, H., Jaidane, M., and Ezzine, J., "On Exact Performances of Adaptive Volterra Filters: the Finite Alphabet Case," accepted, *2000 IEEE International Symposium on Circuits and Systems (ISCAS'2000)*, Emerging Technologies for the 21st Century, Geneva, Switzerland, 28-31 May, 2000.
6. Besbes, H., J. Ezzine, and M. Jaidane, "Exact Tracking Performance Analysis of Land Mobile Satellite Channels," *Proc. IEEE/Globecom'99*, Rio de Janeiro, Brazil, 5-9 Dec., 1999.
7. Ezzine J. and F. L. Lewis, "Disturbance-Accommodating Neurocontrol (DANC)," *Proc. 1999 IFAC World Congress*, Beijing, P. R. China, July 1999.
8. Besbes, H., Jaidane, M., and Ezzine, J., "On Exact Performance Evaluation of Adaptive Volterra Filters: The Finite Alphabet Case," *Proc. IEEE-EURASIP, Workshop on Nonlinear Signal and Image Processing (NSIP'99)*, Antalya, Turkey, June 1999.
9. Besbes, H., Jaidane, M., and Ezzine, J., "Analyse de la Convergence de l'Algorithme du Signe LMS," *Proc. 6<sup>ème</sup> Colloque Magrebin sur les Modèles Numeriques de l'Ingénieur*, Tunis, Tunisia, Nov. 1998.
10. Besbes, H., Jaidane, M., and Ezzine, J., "On Tracking Time-Varying Channels: Large Step Analysis," *Proc. IEEE-SMC CESA '98*, Nabeul-Hammamet, Tunisia, Nov. 1998
11. Ben Cheikh, Y., and Ezzine, J., "On Almost-Sure Stabilization of Large-Scale Discrete-Time Jump Parameter Systems: A Pole Placement Approach," *Proc. IEEE-SMC CESA '98*, Nabeul-Hammamet, Tunisia, Nov 1998.

12. Besbes, H., Jaidane, M., and Ezzine, J., "Exact Analysis of the Tracking Capability of Time-Varying Channels: The Finite Alphabet Input Case," *Proc. 5th IEEE Int. Conf. on Elec. Circ. and Systems (ICECS'98)*, Lisboa, Portugal, Sept. 1998.
13. Ben Cheikh, Y., and Ezzine, J., "On Almost-Sure Stabilization of Large-Scale Discrete-Time Jump Parameter Systems," accepted, *Proc. IFAC-LSS'98*, Patras, Greece, July 1998.
14. Besbes, H., Jaidane, M., and Ezzine, J., "Convergence des Filtres Adaptatifs dans le Contexte Alphabet Fini," *Proc. GRETSI*, Grenoble, France, 1997.
15. Besbes, H., Jaidane, M., and Ezzine, J., "Almost Sure and Mean Square Convergence of Adaptive Filters: The Finite Alphabet Case," *Proc. Workshop, COST 254 on Emerging Techniques for Communication Terminals*, Toulouse, France, 1997.
16. Ezzine, J., "On the Brockett-Blankenship Embedding of Two-Form Jump Linear Systems and their Riccati Transformation," *Proc. IFAC'96*, San Francisco, California, 1996.
17. Besbes, H., Jaidane, M., and Ezzine, J., "Convergence des Filtres Adaptatifs en Transmission Numerique: Contexte de l'Alphabet Fini," *Proc. 16 émes journées tunisiennes d'électrotechnique et d'automatique*, Nabeul, Tunisia, Nov. 1996.
18. Aghali, E., and Ezzine, J., "Bornes de Stabilité Robuste pour les Systèmes Échantillonnés à Paramètres Incertains Structurés," *Proc. 16 émes journées tunisiennes d'électrotechnique et d'automatique*, Nabeul, Tunisia, Nov. 1996.
19. Ezzine, J., "Robust Stability Bounds for Sampled-Data Systems: The Unstructured Perturbations Case," *Proc. IEEE 15th ACC*, Seattle, Washington, June 1995.
20. Ezzine, J., and Ben-Daya, M., "Singularly Perturbed Nonlinear ODE's and Interior Point Optimization Algorithms," *Proc. IEEE 15th ACC*, Seattle, Washington, June 1995.
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