CURRICULUM VITAE

Aug - 2010

Control and Intelligent Processing Center of Excellence
School of Electrical and Computer Engineering
Engineering Faculty, University of Tehran, Tehran, Iran

Home Address:

Birth Date - Place:
Home Phone:
Cell Phone:
Email:

RESEARCH INTERESTS

- Fault Detection and Diagnosis, System Identification and Pattern Recognition
- Image Processing, Image Segmentation, Face Recognition
- Decision Making (DM) Under Uncertainty, Fuzzy DM, Group DM

EDUCATION

- **University of Tehran**[*], Tehran, Iran
  M.Sc., Electrical Engineering, Control[**]
  Thesis: Feature Extraction and
  Advisor: Dr. Araabi
  Overall GPA: **18.82/20 (up to now)**
  September 2009
  June 2011(expected)
  * University of Tehran is the oldest, largest and most prestigious university of Iran.
  ** Iran ministry of science, research and technology has selected control and intelligent processing department of university of Tehran as the only center of excellence in this field.
- **University of Tehran**, Tehran, Iran
  B.Sc., Electrical Engineering, Control
  Thesis: Design a Model-Based Fault Detection and Diagnosis in the CSTR Benchmark (**20/20**)
  Advisor: Dr. Salahshoor
  Last Three Semesters GPA: **19.45/20**
  Overall GPA: **18.74/20**
  September 2005
  September 2009
- **Shahid Beheshti High school** (National Organization for Development of Exceptional Talents), Tehran, Iran
  Overall GPA: **19.77/20**
  2000 - 2004

GRADUATE COURSES

- Stochastic Process: 15.3/20
- Fuzzy Systems : --/20
- Nonlinear Control: Auditing
- Optimal Control : 19/20
- Image Processing: Audited
- Game Theory: 20/20
- Pattern Recognition : --/20
- System Modeling and Identification:20/20
- Machine Vision: 19/20

PUBLICATIONS

[1] H. Arbab ,B. Jazi, and M. **Rezagholizadeh**, "A computer tracking system of solar dish with two-axis degree freedoms based on picture processing of bar shadow" , *Elsevie*r. *Renewable Energy*, April 2009, vol. 34, pp. 1114-1118.

[2] H. Arbab , and M. **Rezagholizadeh** , "Numerical simulation to optimize the reflected energy distribution as a function of electromagnetic wave polarization and focal length of the semi infinite lens with parabolic boundary surface" , Submitted to *Elsevier. Renewable Energy* in Oct.

[3] M. **Rezagholizadeh** , K. Salahshoor, and E. Moradi, "A new EKF-Based fault detection and diagnosis approach utilizing an innovative residual generation scheme", Accepted in ***ICMA 2010***.

[4] E. Moradi**,** K. Salahshoor, and **M. Rezagholizadeh,** "Design a low price and high performance sensor network using of constrained-base unscented Kalman filter", accepted in ICCAS 2010 conference.

[5] M. **Rezagholizadeh,** A. Fereidounian, and B. Dehghan "A Modified Partial Order Theory Approach to Multi Criteria Decision Making," submitted to ICFIEA 2010.

[6] M. **Rezagholizadeh,** A. Fereidounian, and B. Dehghan "Partial order based multi criteria decision making under uncertainty," under submission to *Elsevier*. *Journal of European Journal of Operation Research.*

[7] M. **Rezagholizadeh,** A. Fereidounian, and C. Lucas, "A fuzzy multi-criteria approach for IT infrastructure selection in power distribution automation using modified AHP and TOPSIS**,**" under submission to *Elsevier. Journal of Expert Systems with Applications*.

[8] **M. Rezagholizadeh,** B. Araabi, and H. Arbab, **"Design and implementation of a fuzzy multilevel image segmentation unit for the vision based automatic sun tracking systems"** under submission to *Elsevier. Journal of Expert Systems with Applications*.

HONORS, AWARDS AND RANKS

- ***Ranked 2nd*** among all Electrical and Computer Engineering students, University of Tehran. — 2005-2009
- ***Ranked 1st*** among all Electrical and Computer Engineering students, University of Tehran. — 2008-2009
- ***Ranked 3rd*** among all Electrical and Computer Engineering students, University of Tehran. — 2007-2008
- ***Ranked 1st*** among all Control Engineering students, University of Tehran. — 2007-2009
- Winner of (Faculty Of Engineering) Award for ***ranking 2nd*** among all Electrical Engineering students at University of Tehran from Alumni Association of Faculty of Engineering, University of Tehran. — Winter 2010
- Winner of (Faculty Of Engineering) Award for ***ranking 3rd*** among all Electrical Engineering students at University of Tehran from Alumni Association of Faculty of Engineering, University of Tehran. — Winter 2009
- Faculty of engineering scholarship as an **Exceptional Talent** student for **8 semesters**. — Spring 2008, Fall 2009 Spring 2005, Fall 2005
- Ranked **260th** among more than 400,000 participants in *Nationwide Universities Entrance Exam (BSc)*. — Summer 2004

ONGOING PROJECTS

- Stochastic Dynamic Stock Market Modeling and Decision Making using Game Theory
- Design and Implementation of Vision Based CNC System for Making Optical Lenses

Work Experiences (Industrial & Research)

- University of Tehran, ECE Department, Tehran, Iran — 2008 until now
  Research Assistant of Dr. Freidounian in:
  IT Infrastructure Selection in Power Distribution Automation Using Decision Making Techniques
  Uncertain Decision Making
- University of Kashan, Energy Research Institute, Kashan, Iran — Summer 2006 until now
  Research Assistant of MSc. Arbab in:
  Design and Implementation of an Automatic Vision Based Sun Tracking System. — **Summer 2009**
  Design and Implementation of Vision Based CNC System for Making Optical Lenses — **current**
  Numerical simulation to optimize the reflected energy distribution as a function of electromagnetic wave polarization and focal length of the semi infinite lens with parabolic boundary surface — Summer 2008

Teaching Experiences

• **Operation Research** *Instructor: Dr. Rahimi Kian*	Teaching Assistant	ECE Department University of Tehran	Fall 2009
• **Linear Control Systems** *Instructor: Dr. Salahshoor*	Teaching Assistant	ECE Department University of Tehran	Fall 2009
• **Modern Control** *Instructor: Dr. Khaki Seddigh*	Teaching Assistant	ECE Department University of Tehran	Spring 2009
• **Electric Machines II** *Instructor: Prof. Lesani*	Teaching Assistant	ECE Department University of Tehran	**Spring 2008**
• **Electric Machines I** *Instructor: Prof. Lesani*	Teaching Assistant	ECE Department University of Tehran	**Fall 2007** **Fall 2008** **Spring 2009** **Fall 2009** **Spring 2010**
• **Linear Control Systems** *Instructor: Prof. Jabedar Maralani*	Grader	ECE Department University of Tehran	Fall 2008
• **Linear Control Systems** *Instructor: Dr. Bahrami*	Grader	ECE Department University of Tehran	Spring 2008
• **Signals and Systems** *Instructor: Dr. Nasiri*	Grader	Engineering Faculty University of Tehran	Spring 2008
• **Digital Logic Design** *Instructor: Dr. Navvabi*	Grader	ECE Department University of Tehran	Fall 2007

- My responsibilities included holding discussion sessions, administration of course's website, coordinating between TAs, and arranging and grading homework assignments.

Selected Academic Projects

- Fault Detection and Diagnosis in Nonlinear Systems Using Extended Kalman Filter and Neuro-Fuzzy Network (Application in the CSTR Benchmark) — Spring 2010
- Design and Implementation of Uninterruptable Power Supply (UPS) — Spring 2009
- Design, Simulation and Implementation of a simple CPU and Stack on FPGA, as final project for Logic Lab. — Spring 2009
- Design state feedback, full and reduced order observers for a modeled vehicle and optimizing it, as final project for Modern Control course. — Spring 2008
- Design, Simulation and Implementation of Speed *Control of DC Motors Using AVR Microcontroller*, as final project for Microprocessor course. — Spring 2007
- Design and Implementation of a Conveyer with AVR microcontroller, as final project for General Workshop course. — Spring 2008

Skills

- **Computer:**
  Windows, MS Office, MATLAB, Simulink, C++, Visual Basic, Assembly, Quartus, CX-Programmer, Code Vision (AVR Programming Software)
- **Language:**
  Persian as a native language
  Fluent in English, TOEFL: to be taken on October 31th
  GRE (General): Q: --, V: --, AW: -
- **Certification:**
  Patent Registering Organization certification for design and implementation of an automatic vision based sun tracking system.

Society and Committee Memberships

- IEEE Student member
- In Charge of IEEE Control Group of University of Tehran Student Branch
- Member of International Council on Systems Engineering (INCOSE)
- Member of Control and Intelligent Processing Center of Excellence (CIPCE), University of Tehran, Tehran, Iran

Extracurricular Activities

- Reading, Music, Movie, Soccer, Swimming, Tennis, photographing.

References

- Excellent references are available upon request.