

Vahid Alizadeh



+98-912-1903383



vahid.alizadeh@ut.ac.ir



Unit 3, Floor 2, No 2, First Dead End, Haghghi Dead End, Sadoughi St, North Karegar St, Tehran, Iran. P.O. Box: 14186-16484

EDUCATION



University of Tehran, Tehran, Iran

2011–Present

M.Sc, Electrical Engineering, Concentration in Control Systems

First three semesters (first 23 credits) cumulative GPA: 16.41/20

Thesis Title: "Face Recognition Using Thermal Image Processing."

Supervisor: [Dr. E. Arbabi](#)

Relevant Courses:

- Digital Image Processing
- System Identification
- Optimal Control
- Pattern Recognition
- Fuzzy logic
- Digital Control

Iran University of Science and Technology, Tehran, Iran

2006–2011

B.Sc, Electrical Engineering, Concentration in Control Systems

Thesis Title: "Implementation and Designing Intelligent Traffic Light Control by Fuzzy Logic."

Supervisor: [Dr. J. Poshtan](#)

ACADEMIC PROJECTS COURSE PAPERS



- *Digital Image Processing (Fall 2012)*:
 - Extracted face vascular network using morphological process and anisotropic diffusion filter from thermal images.
 - Denoised images based on reaction equation and curvelet transform.
- *Graduate Seminar (Fall 2012)*: Conducted a survey on different face recognition methods for visual and thermal images.
- *System Identification (Spring 2012)*:
 - Examined the linear dynamic models and compared the obtained system parameters and the estimated values of ARX, ARMAX, OE and BJ.
 - Conducted a background research on Maximum likelihood Multivariate Calibration and simulated state of the art methods on sample data
- *Social Network (Spring 2012)*: Analyzed graph balance in weighted signed networks using extracted data of a persian social network website.
- *Pattern Recognition (Fall 2011)*: Classified Persian alphabet based on Support Vector Machine (SVM), Neural Network Classifier and K- Means.
- *Optimal Control (Fall 2011)*:
 - Designed a particle swarm based optimal controller.
 - Designed a UKF controller for a Digital Pendulum.
- *Digital Control Systems (Winter 2008)*: Simulated satellite attitude control system with reaction wheel.

RESEARCH INTERESTS



- Image Processing
- Pattern Recognition
- Modeling & Simulation
- Neural Networks
- Machine Vision
- Machine Learning
- Estimation Theory
- Robotics

WORK EXPERIENCES



Teaching Assistant

- [System Identification](#)
 - Pattern Recognition
- 2013

Teaching

- Developed innovative and appropriate methods to teach MATLAB in "MATLAB Course and GUI Workshop", 1st academic summer festival of IEEE student branch, Iran University of Science and Technology, Tehran, Iran
- 2007

- Teaching Physics and Mathematics to High School Students
- 2006-2008

Research Assistant

2011-Present

University of Tehran, Tehran, Iran

- Discovered a new method using graph features allowing for better classification of thermal images of faces.
- Collaborated with Research Center of Intelligent Signal Processing to collect data for the thesis study.

Research and Development (Internship)

Jun. 2011-Sep. 2011

Shiva Systems Pooya Co., Tehran, Iran

- Conducted research and development in sensors and instrumentations
- Designed, developed, and tested prototype hardware and software

PUBLICATION



- V. Alizazdeh, S. Rayatdoost, E. Arbabi, "Investigation on Different Partitioning of Face Imprint for Thermal Face Recognition", 22th Iranian Conference on Electrical Engineering (ICEE), 2014. *(Under Review)*

AWARDS, HONORS, CERTIFICATES



- **Top 0.5% among over 30,000** participants in the nationwide university entrance exam for M.Sc degree in Electrical Engineering 2011
- **Top 0.1% among over 400,000** participants in the nationwide university entrance exam for B.Sc degree in Mathematics and Physics 2005
- **Awarded full scholarship** in MSc. Degree from UT 2011-2013
- **Awarded full scholarship** in BSc. Degree from IUST 2006-2011
- **Certified with Distinction for Image and Video Processing** by Duke University 2013
- **Certified for AVR Microcontroller** Practical Course with A+ Grade Offered by IEC Institution 2010
- **Certified for PLC S7-300** Practical Course Offered by IEC Institution 2009

SKILLS



• Language Skills:

Persian (Native)

English (Fluent)

TOEFL IBT exam score: **100** R 27, L 25, S 26, W 22

Arabic (Familiar)

• Technical Tools:

Matlab, Code Vision, Protel DXP, Solid Work, Orcad, AVR Studio

• Programming Languages:

C/C++, PHP, HTML, CSS, MYSQL, PYTHON

• Others:

AVR microcontroller, Practical work with variety of measurement systems and sensors, Microsoft Office, CMS (Joomla, Wordpress, Drupal, PHPnuke,...), Website Building, VPS management, Adobe Photoshop, Adobe InDesign

EXTRA-CURRICULAR ACTIVITIES



- Chairman of IEEE Student Branch of IUST 2009-2010
- President of Scientific Association of Electrical Engineering Department of IUST 2007-present
- Deputy of National Scientific Student's Organization of Electrical Engineering in IUST 2009-2011
- Member of Editorial Board of IEEE Student Branch Newsletter of IUST 2008-2010
- Designer and Administrator of IEEE Student Branch Website of IUST 2008-2010
- Executive Cooperator in 17th Iranian Conference on Electrical Engineering 2009

REFERENCES



• Dr. Ehsan Arbabi, Assistant Professor

School of Electrical & Computer Engineering, University of Tehran, Tehran, Iran

Phone: +98-21-61119747

E-mail: earbabi@ut.ac.ir

• Dr. Javad Poshtan, Associate Professor

School of Electrical Engineering, Iran University of Science and Technology, Tehran, Iran

Phone: +98-21-77240492

E-mail: jposhtan@iust.ac.ir