



## **Gholamreza Anbarjafari, PhD**

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**Date of Birth:** 6<sup>th</sup> December 1980

**Nationality:** Iranian

### **Education:**

- July 08 – Dec2010**    **Eastern Mediterranean University (EMU), North Cyprus**  
**PhD Electrical and Electronic Engineering**  
(Supervisors: Assoc. Prof. Dr. Hasan Demirel; External jury members: Prof. Bulent Sankur, Prof. Muhittin Gokmen)
- Feb 07 – Jun 08**    **Eastern Mediterranean University (EMU), North Cyprus**  
**MS Electrical and Electronic Engineering**  
Graduated in June 2008 with **CGPA 4.00** (First ranking MS graduate in EMU).
- Sep 03 – Feb 07**    **Eastern Mediterranean University (EMU), North Cyprus**  
**BS Electrical and Electronic Engineering**  
Graduated in February 2007 as the top student of faculty of Engineering with **CGPA of 3.97**. (First ranking BS graduate in Faculty of Engineering).
- Sep 99- Jun 03**    **Shiraz University, Iran**  
**BS Electronic Engineering**  
Course Modules for four years that I was there, covered all range of electrical and electronic engineering, including digital and analogue electronics, Circuit design, Computer architecture, math, programming (C, Basic and MATLAB), Communication and signal processing. We had regular practical lab work, where we worked in groups.
- 1995- 1999**    **Mollasadra High School, Iran;** I obtained diploma with 1<sup>st</sup> class average (total average of 19.81 out of 20 – **First** ranking graduate in the City).

### **Work Experience:**

- Aug 2012- Present**    **Lecturer, Cyprus International University (Full Time)**  
I am being asked to teach some electrical and electronic engineering and computer science courses. I am teaching undergraduate and graduate level courses as well as supervising MSc and PhD Thesis.

**July 2011- July 2012 Lecturer, Hasan Kalyoncu University (Full Time)**

I am being asked to teach some electrical and electronic engineering courses. I was Vice Dean of Faculty of Engineering and Architecture and President's Advisor.

**July 2009- June2011 Lecturer, Cyprus International University (Full Time)**

I started my job as a lecturer at CIU as a part-time in summer 2009 by teaching object oriented programming using Java, and then I have been promoted as a **full-time** lecturer since September in the Department of Information System Engineering. I am being asked to teach some computer engineering and information system engineering courses.

**Feb 2007- July2009 Research Assistant, EMU (Full Time)**

I have been selected as a full time research assistant at EMU since February 2007. I was the lab coordinator of Electrical Circuit I, Communication, Data Structure and Algorithm, and Microprocessor modules.

I am also assisting the department of electrical and electronic engineering for preparation of achieving ABET2000.

**Sep 2003- Feb 2008 Assistant of robotic laboratory, EMU (Full Time)**

I built two robots and I had demonstration of controlling a robot arm each semester for student who took robotic course. I have designed webpage for robotic lab (<http://faraday.ee.emu.edu.tr/robotics>). I co-operated a robotic project with two final year students to build a robot which avoid obstacles.

**Sep 2003- Aug 2005 Assistant of computer laboratory, EMU (Part Time)**

I helped students who had some difficulties with MS Office and other technical software such as MATLAB, PSPice, etc. Also I helped the hardware group to fix the broken computers.

**Sep 1999-Jun 2003 Assistant of computer laboratory, Shiraz University (Full Time)**

I was working in the Kharazmi computer centre of Faculty of Engineering of Shiraz University. I was working with the administrator group.

**Awards:**

- My research paper entitled "Image Super Resolution Based on Interpolation of Wavelet Domain High Frequency Subbands and the Spatial Domain Input Image" has been awarded as the **best paper** of 2012 by ETRI Journal.
- I got second place in "Genç Girişimcileri Destekleme Proje Yarışması" in October 2008.
- I got third place in "Genç Girişimcileri Destekleme Proje Yarışması" in October 2007.

- I have been employed as a full time research assistant at department of Electrical and Electronic Engineering in EMU since February 2007.
- I have won scholarship from TRNC Ministry of Education while studying for my BSc at EMU.
- For six consecutive semesters I have been a high honour student while studying for my BSc at EMU.

***Funded project:***

- Iris Recognition System using Different Colour Channel Statistics. Type A project support from EMU (February 2008) 16,510YTL.
- 3B MRI görüntü oluşturma. T.C. / KKTC BİLİMSEL ARAŞTIRMA PROJELERİ (February 2011) 17,000YTL.

**Teaching Skills:**

I have been a teaching/lab assistant of the following courses at Eastern Mediterranean University:

- EENG223 - Circuit Theory I
- EENG212 - Data Structure and Algorithm
- EENG226 – Signal and Systems
- EENG360 - Communication I
- EENG410 - Microprocessor I

I have taught the following courses:

- ELE526: Digital Image Processing (Graduate level)
- ELE502: Advanced Circuit and System Analysis (Graduate level)
- ELE500: Seminar (Graduate level)
- CPE452: Signal processing with MATLAB
- CPE417: Computer Graphics
- ELE307: Signals and Systems
- ELE304: Electrical Measurement
- CPE324/ELE309: Microprocessor
- CPE326: Signal and Image Processing
- CPE313: Object oriented programming (java)
- ISE 361: Essential of information technology
- CPE222: Fundamental of electronics
- CPE221: Digital logic design
- STA205: Statistics
- CPE112: Introduction to C programming
- CPE101: Introduction to computer and algorithm
- CME110: Introduction to computer
- PHY101: Physics I
- MAT101: Calculus I
- MAT102: Calculus II
- ELE300: Coordinator of summer training

**Research Area:**

Major: Image/Signal Processing:

- Image super resolution
- Image coding

- Watermarking
- Face Detection and Recognition
- Iris Segmentation and Recognition
- Image Enhancement
- Machine vision
- low bit rate video and image transmission
- Data Fusion
- Robotics

**Minor: Mathematics and Algebra:**

- Matrix theory
- Abstract Algebra
- Probability

**Graduate Courses Taken (MSc and PhD):**

- Advance Image Processing
- Advance Digital Signal Processing
- Wireless Communication
- Probability and Stochastic Processing
- Knowledge Engineering
- Optimization Theory
- Linear System Theory I
- Abstract Algebra
- Real Analysis
- Probabilistic Modelling
- Advanced Circuit and System
- Neural Network

**Technical Courses Taken (Undergraduate):**

- Communication I
- Communication II
- Introduction to Robotics
- Computer Architecture
- Microwave Application
- Control System Theory I
- Digital Signal Processing

**Publications:**

**BOOKS:**

1. **Gholamreza Anbarjafari** and Hasan Demirel, *Modern Face Recognition*, VDM Verlag, 2011, ISBN: 978-3639374353, July. 2011.
2. **Gholamreza Anbarjafari** and Hasan Demirel, *Face Recognition by Using Statistical Analysis*, Lambert Academic Publishing, 2010, ISBN: 978-3-8433-7068-4, Oct. 2010.

3. **Gholamreza Anbarjafari** and Hasan Demirel, *Face Recognition Using Colour Statistics: Biometric Recognition*, VDM Verlag, 2010, ISBN: 978-3-639-24704-6, Mar. 2010.

#### BOOK CHAPTERS:

1. Sara Izadpanahi, Cagri Ozcinar, **Gholamreza Anbarjafari**, and Hasan Demirel, "DWT Based Resolution Enhancement of Video Sequences", *Discrete Wavelet Transforms - A Compendium of New Approaches and Recent Applications*, edited by Awad Kh. Al - Asmari, ISBN 978-953-51-0940-2, InTech, February 2, 2013.
2. Hasan Demirel, Cagri Ozcinar, and **Gholamreza Anbarjafari**, "Image illumination enhancement based on singular value decomposition and discrete wavelet transform", *Discrete Wavelet Transforms –Theory and Applications*, edited by Juuso T. Olkkonen, ISBN 978-953-307-185-5, InTech, April 4, 2011.
3. Hasan Demirel and **Gholamreza Anbarjafari**, "Probability distribution functions based face recognition system using discrete wavelet subbands", *Discrete Wavelet Transforms –Theory and Applications*, edited by Juuso T. Olkkonen, ISBN 978-953-307-185-5, InTech, April 4, 2011.

#### JOURNALS:

1. **Gholamreza Anbarjafari**, "Face recognition using color local binary pattern from mutually independent color channels", *EURASIP Journal on Image and Video Processing*, 2013.
2. **Gholamreza Anbarjafari**, Sara Izadpanahi, and Hasan Demirel, "Video resolution enhancement by using discrete and stationary wavelet transforms with illumination compensation", *Journal of Signal, Image and Video Processing*, DOI: 10.1007/s11760-012-0422-1, 2013.
3. Hasan Demirel, **Gholamreza Anbarjafari**, Cagri Ozcinar, and Sara Izadpanahi, "Resolution Enhancement of Video Sequences by Using Discrete Wavelet Transform and Illumination Compensation", *Turkish Journal of Electrical Engineering & Computer Sciences*, Vol. 20, 2012, pp.1268-1276.
4. **Gholamreza Anbarjafari**, Hasan Demirel, and Erbug Celebi, "Resolution Enhancement of Images Taken by a Mobile Phone Camera", *Electronics World*, Feb 2012, Vol. 118, No. 1910, pp. 30-33.
5. Hasan Demirel and **Gholamreza Anbarjafari**, "Discrete Wavelet Transform Based Satellite Image Resolution Enhancement", *IEEE Transaction on Geoscience and Remote Sensing*, 2011, DOI: 10.1109/TGRS.2010.2100401, Vol. 49, pp. 1997 – 2004.
6. Hasan Demirel and **Gholamreza Anbarjafari**, "Image Resolution Enhancement by Using Discrete and Stationary Wavelet Decomposition", *IEEE Transaction on Image Processing*, 2011, DOI: 10.1109/TIP.2010.2087767, Vol. 20, pp. 1458 - 1460.

7. **Gholamreza Anbarjafari** and Hasan Demirel, "Image Super Resolution Based on Interpolation of Wavelet Domain High Frequency Subbands and the Spatial Domain Input Image", *ETRI Journal*, Vol. 32, No. 3, Jun 2010, pp. 390-394.
8. Hasan Demirel, **Gholamreza Anbarjafari**, and Cagri Ozcinar, "Satellite Image Contrast Enhancement Using Discrete Wavelet Transform and Singular Value Decomposition", *IEEE Geoscience and Remote Sensing Letter*, April 2010, Vol. 7, No. 2, pp. 334-338.
9. Hasan Demirel and **Gholamreza Anbarjafari**, "Histogram based face recognition", *ELECTRONICS WORLD*, Dec 2009, pp. 20-23.
10. Hasan Demirel and **Gholamreza Anbarjafari**, "Satellite Image Super Resolution Using Complex Wavelet Transform", *IEEE Geoscience and Remote Sensing Letter*, Jan 2010, Vol. 7, Issue 1, pp. 123-126.
11. Hasan Demirel and **Gholamreza Anbarjafari**, "Data Fusion Boosted Face Recognition Based on Probability Distribution Functions in Different Colour Channels", *EURASIP Journal of Advances on Signal Processing*, 2009, pp. 1-13.
12. Hasan Demirel and **Gholamreza Anbarjafari**, "Pose Invariant Face Recognition using Probability Distribution Functions in Different Color Channels", *IEEE Signal Processing Letters*, Vol. 15, 2008, pp. 537 - 540.
13. Hasan Demirel, **Gholamreza Anbarjafari**, M. Sarioglu, and Y. A. Erdem, "IRIS-JUDGE: PCA based Iris Recognition and Verification System", *Electronics World*, June 2008, Vol. 114, pp: 34-37.

#### CONFERENCES:

##### INTERNATIONAL:

1. Awwal Mohammed Rufai, **Gholamreza Anbarjafari**, and Hasan Demirel, "Huffman Kodlama ve Tekil Değer Ayrışımı kullanarak Yitimli Tıbbi İmge Sıkıştırma", 21. *IEEE Sinyal İşleme ve Uygulamaları Kurultayı*, 2013.
2. Pejman Rasti, **Gholamreza Anbarjafari**, and Hasan Demirel, "Aradeğerleme ve Ardından Geri İteratif Projeksiyon Kullanarak İmge Çözünürlüğü Geliştirme", 21. *IEEE Sinyal İşleme ve Uygulamaları Kurultayı*, 2013.
3. Hacı Tasmaz, Hasan Demirel, and **Gholamreza Anbarjafari**, "Çift Ağaçlı Karmaşık Dalgacık Dönüşümü Kullanarak Uydu İmge Pekiştirme: Gürültü Ayıklama ve Aydınlatma Pekiştirme", 20. *IEEE Sinyal İşleme ve Uygulamaları Kurultayı*, 2012.
4. Cagri Ozcinar, **Gholamreza Anbarjafari**, Sara Izadpanahi, and Hasan Demirel, "Video Resolution Enhancement By Using Complex Wavelet Transform", *International Conference on Image Processing (ICIP)*, 2011, pp. 2093 - 2096.

5. **Gholamreza Anbarjafari**, Cagri Ozcinar, Sara Izadpanahi, and Hasan Demirel, "Tekil Değer Ayırışımı Ve Ayrik Dalgacık Dönüşümü Kullanarak Aydınlatma Dengeleme", *IEEE Sinyal Isleme ve Uygulamalari Kurultayi*, 2011, pp. 904 - 907.
6. Hasan Demirel and **Gholamreza Anbarjafari**, "Karmaşık Dalgacık Dönüşümü ve Tekil Değer Ayırışımı tabanlı İmge Kontrast İyileştirme", *18. IEEE Sinyal Isleme ve Uygulamalari Kurultayi, SIU'2010*, April 2010, pp. 332 - 335.
7. Hasan Demirel and **Gholamreza Anbarjafari**, "Improved Face Recognition System Using Probability Distribution Functions Extracted from Wavelet Subbands", *24<sup>th</sup> International Symposium on Computer and Information Sciences, ISCIS 2009, Guzelyurt, METU-NCC, Turkish Republic of North Cyprus*.
8. Hasan Demirel, **Gholamreza Anbarjafari**, and Sara Izadpanahi, "Improved Motion-Based Localized Super Resolution Technique Using Discrete Wavelet Transform for Low Resolution Video Enhancement", *17<sup>th</sup> European Signal Processing Conference (EUSIPCO-2009)*, Edinburgh, Scotland, Aug. 2009.
9. Hasan Demirel and **Gholamreza Anbarjafari**, " Farklı Renk Kanallarında Ayrik Dalgacık Ayırışımı kullanan PDF Tabanlı Yüz Tanıma Sistemi ", *17. IEEE Sinyal Isleme ve Uygulamalari Kurultayi, SIU'2009, Antalya, Apr. 2009*, pp. 520-523.
10. Hasan Demirel and **Gholamreza Anbarjafari**, "Iris Recognition System Using Combined Colour Statistics ", *8<sup>th</sup> IEEE International Symposium on Signal Processing and Information Technology, ISSPIT 2008*, Bosnia and Herzegovina.
11. Hasan Demirel, **Gholamreza Anbarjafari**, and Mohammad N. Sabet Jahromi, "Image Equalization Based on Singular Value Decomposition", *23<sup>rd</sup> International Symposium on Computer and Information Sciences, ISCIS 2008, Istanbul, Turkey*.
12. Hasan Demirel and **Gholamreza Anbarjafari**, "Iris Recognition System Based on Combined Histograms", *23<sup>rd</sup> International Symposium on Computer and Information Sciences, ISCIS 2008, Istanbul, Turkey*.
13. Hasan Demirel and **Gholamreza Anbarjafari**, "A New Face Recognition System based on Color Histogram Matching", *16. IEEE Sinyal Isleme ve Uygulamalari Kurultayi, SIU'2008, Didim, Türkiye, Apr. 2008*.
14. H. Demirel, and **G. Anbarjafari**, "Pose Invariant Face Recognition Using Image Histograms", *The 3<sup>rd</sup> International Conference On Computer Vision Theory and Applications (VISAPP 2008)*, Portugal, Vol: 2, pp: 282-285.

#### NATIONAL:

1. Hasan Demirel and **Gholamreza Anbarjafari**, "PDF Based Face Recognition Using Sift Features", *FAE2010*, Submitted in October 2010.
2. Hasan Demirel, **Gholamreza Anbarjafari**, and Cagri Ozcinar, "Face Recognition By Using Probability Distribution Function And Feed Forward Neural Network", *International Science and Technology Conference*, Salamis, North Cyprus, October 2010.

3. Hasan Demirel, **Gholamreza Anbarjafari** and Mohammad N. Sabet Jahromi, "Skin detection in *HSI* colour space", *5<sup>th</sup> International Conference on Electrical and Computer Systems (EECS'08)*, November 27-28, 2008, Lefke, North Cyprus.
4. Hasan Demirel and **Gholamreza Anbarjafari**, "Ensemble Based Approach for Colour Face Recognition Using Principal Component Analysis", *5<sup>th</sup> International Conference on Electrical and Computer Systems (EECS'08)*, November 27-28, 2008, Lefke, North Cyprus.
5. Hasan Demirel and **Gholamreza Anbarjafari**, "*HSI* Based Colour Image Equalization using Iterative  $n^{\text{th}}$  Root and  $n^{\text{th}}$  Power", *5<sup>th</sup> International Conference on Electrical and Computer Systems (EECS'08)*, November 27-28, 2008, Lefke, North Cyprus.

#### OTHER PUBLICATIONS:

1. Hasan Demirel and **Gholamreza Anbarjafari**, "Improved PDF Based Face Recognition Using Data Fusion", *International Journal of Electronics; Mechanical and Mechatronics Engineering*, Vol. 2, No. 2, 2012, pp. 195-200.
2. **Gholamreza Anbarjafari**, Hasan Demirel, Aykut Hocanın, and Çağrı Özçınar, "Error Protection of PCA Based Face Recognition for Transmission Over Noisy Channels", *International Journal of Electronics; Mechanical and Mechatronics Engineering*, Vol. 2, No. 2, 2012, pp. 166-271.
3. Hasan Demirel, **Gholamreza Anbarjafari**, "High Performance Face Recognition using Histogram Matching", *EMO Bilim*, sayı. 22, Kas. 2008, pp: 58-61.
4. Hasan Demirel, **Gholamreza Anbarjafari**, "Identification based on Iris Recognition", *EMU Research Newsletter*, issue 2008/2, pp: 13-15.

#### PROFESSIONAL DUTIES:

- TCP member of EUSIPCO 2009
- Reviewer of EUSIPCO since 2009 in the field of image processing (biometric classification)
- Reviewer of Journal of IET-Computer Vision since 2009
- Reviewer of Journal of IET-Image Processing since 2010
- Reviewer of EURASIP Journal on Information Security since 2010
- Reviewer of IEEE Transaction on Geoscience and Remote Sensing since 2011
- Reviewer of IEEE Transaction on Image Processing since 2012
- Reviewer of IEEE Geoscience and Remote Sensing Letter since 2010
- Reviewer of Journal of Circuits, Systems and Signal Processing since 2010
- Reviewer of ICSCCW 2009
- Reviewer of ISCIS 2009
- Reviewer of WSEAS conference series in field of computer vision since 2009
- Reviewer of ICCSIT2011
- Reviewer and Organizer committee member of SIU2013



**Administrative duties:**

- **Summer Training Coordinator** of Department of Electrical and Electronic Engineering at Cyprus International University, since October 2012.
- **President's Advisor** Gazikent Hasan Kalyoncu University, Jan 2012 – July 2012
- **Vice Dean** of Faculty of Engineering and Architecture – Gazikent Hasan Kalyoncu University, Sep 2011 – July 2012
- **Erasmus Coordinator** Faculty of Engineering and Architecture – Gazikent Hasan Kalyoncu University, Sep 2011 – July 2012
- **Summer Training Coordinator** of Department of Information Systems Engineering at Cyprus International University, October 2009- June 2011.

**Additional Skills and Hobbies:**

I can speak fluent English, Turkish, and Farsi.

I am proficient in the use of Word, Excel, MS Outlook, FrontPage, Power Point, C and Java language and FTP server software, plus some experience of Linux Operation System.

I am proficient in MATLAB and Electrical Work Bench.

I also act in the local theatre as an amateur actor. Also I write some short theatre scripts. I have played in Shiraz University Theatre, Eastern Mediterranean University Theatre, and Kayrina Municipality Theatre.

**References:**

**ASSOC. PROF. DR. HASAN DEMIREL:** (VICE CHAIR OF DEPT. OF ELECTRICAL AND ELECTRONIC ENG. - EMU) email: [hasan.demirel@emu.edu.tr](mailto:hasan.demirel@emu.edu.tr) phone: +90-392-630-1436

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**PROF. DR. ABDULAH ÖZTOPRAK:** (PRESIDENT OF EASTERN MEDITERRANEAN UNIVERSITY) email: [abdullah.oztoprak@emu.edu.tr](mailto:abdullah.oztoprak@emu.edu.tr)

**PROF. DR. MUSTAFA Y. KILINÇ:** (DEAN OF FACULTY OF ENGINEERING – GAZIKENT HASAN KALYONCU UNIVERSITY) email: [mykilinc@hku.edu.tr](mailto:mykilinc@hku.edu.tr)