### Assoc. Prof. EVGİN GÖÇERİ

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#### Education

Post Doctorate, Ohio State University, College Of Medicine, Biomedical Informatics, United States Of America 2015 - 2016 Doctorate, Izmir Institute Of Technology, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği Bölümü, Elektronik Ve Haberleşme Programı, Turkey 2007 - 2013 Undergraduate, Ege University, Faculty Of Engineering, Bilgisayar Mühendisliği Bölümü, Turkey 1997 - 2002

#### **Dissertations**

Doctorate, A Comparative Evaluation For Liver Segmentation From SPIR Images And A Novel Level Set Method Using Signed Pressure Force Function, Izmir Institute Of Technology, Fen Bilimleri Enstitüsü, Elektronik Ve Haberleşme Bölümü, 2013

#### **Research Areas**

Biomedical Engineering, Biomedical Image Processing, Engineering and Technology

#### **Academic Positions**

Associate Professor, Akdeniz University, Faculty of Engineering, Department of Biomedical Engineering, 2018 -Continues Assistant Professor, Akdeniz University, Faculty of Engineering, Department of Computer Engineering, 2015 - 2018

#### Journal articles indexed in SCI, SSCI, and AHCI

I. An efficient network with CNN and transformer blocks for glioma grading and brain tumor classification from MRIs GÖÇERİ E.

Expert Systems with Applications, vol.268, 2025 (SCI-Expanded)

A comprehensive investigation of multimodal deep learning fusion strategies for breast cancer II. classification Nakach F., Idri A., GÖÇERİ E.

Artificial Intelligence Review, vol.57, no.12, 2024 (SCI-Expanded)

III. GAN based augmentation using a hybrid loss function for dermoscopy images Göçeri E.

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- IV. Vision transformer based classification of gliomas from histopathological images GÖÇERİ E.
  - Expert Systems with Applications, vol.241, 2024 (SCI-Expanded)
- V. Nuclei segmentation using attention aware and adversarial networks GÖÇERİ E.

Neurocomputing, vol.579, 2024 (SCI-Expanded)

- VI. Exploring data mining and machine learning in gynecologic oncology Idlahcen F., Idri A., GÖÇERİ E.
  Artificial Intelligence Review, vol.57, no.2, 2024 (SCI-Expanded)
- VII. Medical image data augmentation: techniques, comparisons and interpretations GÖÇERİ E.

Artificial Intelligence Review, vol.56, no.11, pp.12561-12605, 2023 (SCI-Expanded)

VIII. Comparison of the impacts of dermoscopy image augmentation methods on skin cancer classification and a new augmentation method with wavelet packets GÖÇERİ E.

International Journal of Imaging Systems and Technology, vol.33, no.5, pp.1727-1744, 2023 (SCI-Expanded)

IX. Classification of skin cancer using adjustable and fully convolutional capsule layers GÖÇERİ E.

Biomedical Signal Processing and Control, vol.85, 2023 (SCI-Expanded)

X. Evaluation of denoising techniques to remove speckle and Gaussian noise from dermoscopy images GÖÇERİ E.

Computers in Biology and Medicine, vol.152, 2023 (SCI-Expanded)

XI. Diagnosis of skin diseases in the era of deep learning and mobile technology GÖÇERİ E.

COMPUTERS IN BIOLOGY AND MEDICINE, vol.134, 2021 (SCI-Expanded)

XII.Deep learning based classification of facial dermatological disordersGÖÇERİ E.

COMPUTERS IN BIOLOGY AND MEDICINE, vol.128, 2021 (SCI-Expanded)

XIII. CapsNet topology to classify tumours from brain images and comparative evaluation GÖÇERİ E.

IET IMAGE PROCESSING, vol.14, no.5, pp.882-889, 2020 (SCI-Expanded)

# XIV. Diagnosis of Alzheimer's disease with Sobolev gradient-based optimization and 3D convolutional neural network

GÖÇERİ E.

INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, vol.35, no.7, 2019 (SCI-Expanded)

# XV. A method for liver segmentation in perfusion MR images using probabilistic atlases and viscous reconstruction

Dura E., Domingo J., GÖÇERİ E., Marti-Bonmati L.

PATTERN ANALYSIS AND APPLICATIONS, vol.21, no.4, pp.1083-1095, 2018 (SCI-Expanded)

XVI. Quantitative validation of anti-PTBP1 antibody for diagnostic neuropathology use: Image analysis approach

GÖÇERİ E., Goksel B., Elder J. B., Puduvalli V. K., Otero J. J., Gurcan M. N.

INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, vol.33, no.11, 2017 (SCI-Expanded)

XVII. Vessel segmentation from abdominal magnetic resonance images: adaptive and reconstructive approach

Goceri E., Shah Z. K., Gurcan M. N.

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#### XIX. Probabilistic liver atlas construction Dura E., Domingo J., Ayala G., Marti-Bonmati L., GÖÇERİ E. BIOMEDICAL ENGINEERING ONLINE, vol.16, 2017 (SCI-Expanded)

# Automatic labeling of portal and hepatic veins from MR images prior to liver transplantation GÖÇERİ E. INTERNATIONAL JOURNAL OF COMPUTER ASSISTED RADIOLOGY AND SURGERY vol 11 no 12 np 2153-21

INTERNATIONAL JOURNAL OF COMPUTER ASSISTED RADIOLOGY AND SURGERY, vol.11, no.12, pp.2153-2161, 2016 (SCI-Expanded)

# XXI. Fully automated liver segmentation using Sobolev gradient-based level set evolution GÖÇERİ E.

INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, vol.32, no.11, 2016 (SCI-Expanded)

XXII. Quantification of liver fat: A comprehensive review
Goceri E., Shah Z. K., Layman R., Jiang X., Gurcan M. N.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.71, pp.174-189, 2016 (SCI-Expanded)

# XXIII. A comparative performance evaluation of various approaches for liver segmentation from SPIR images

GÖÇERİ E., Ünlü M. Z., Dicle O.

Turkish Journal of Electrical Engineering and Computer Sciences, vol.23, no.3, pp.741-768, 2015 (SCI-Expanded)

# XXIV. Fully automated liver segmentation from SPIR image series

Goceri E., Guercan M. N., DİCLE O. COMPUTERS IN BIOLOGY AND MEDICINE, vol.53, pp.265-278, 2014 (SCI-Expanded)

# Articles Published in Other Journals

I. An Application for Automated Diagnosis of Facial Dermatological Diseases GÖÇERİ E.

Izmir Katip Celebi University Faculty of Health Science Journal, vol.6, no.3, pp.91-99, 2021 (Peer-Reviewed Journal)

II. Fully Automated and Adaptive Intensity Normalization Using Statistical Features for Brain MR Images

GÖÇERİ E.

Celal Bayar Üniversitesi Fen Bilimleri Dergisi, vol.14, pp.125-134, 2018 (Peer-Reviewed Journal)

# III. Automated Detection of Facial Disorders (ADFD): a novel approach based-on digital photographs GÖÇERİ E., GÜNAY M.

COMPUTER METHODS IN BIOMECHANICS AND BIOMEDICAL ENGINEERING-IMAGING AND VISUALIZATION, vol.6, no.6, pp.607-617, 2018 (ESCI)

- IV. Advances in Digital Pathology
  - GÖÇERİ E.

International Journal of Emerging Trends in Health Sciences, vol.1, no.2, pp.49-55, 2017 (Peer-Reviewed Journal)

V. MR Kafa Görüntülerinden Otomatik Kafatası, Doku ve Lezyon Bölütlemesi: Olasılıksal ve Kararlı Bir Yaklaşım

GÖÇERİ E., GÜNAY M., ŞENOL A. U.

Süleyman Demirel Üniversitesi Fen Bilimleri Dergisi, vol.1, no.1, pp.1, 2017 (Peer-Reviewed Journal)

VI. JPEG2000 Standardının Yeni Özelliklerini Destekleyen Bir Görüntü İşleme Uygulaması Geliştirilmesi GÖÇERİ E., YALDIR A. PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK BILIMLERI DERGISI, vol.13, no.3, pp.337-346, 2007 (Peer-Reviewed Journal)

### Papers Presented at Peer-Reviewed Scientific Conferences

- I. Analysis of Capsule Networks for Image Classification
  - GÖÇERİ E.

The 15th International Conference on Computer Graphics, Visualization, Computer Vision and Image Processing (CVGCVIP 2021), 21 - 23 July 2021, pp.53-60, (Full Text)

 II. Capsule Neural Networks in Classification of Skin Lesions GÖÇERİ E.

The 15th International Conference on Computer Graphics, Visualization, Computer Vision and Image Processing (CVGCVIP 2021), 21 - 23 July 2021, pp.29-36, (Full Text)

III.Automated Skin Cancer Detection: Where We Are and The Way to The Future<br/>GÖÇERİ E.

44th International Conference on Telecommunications and Signal Processing (TSP), ELECTR NETWORK, 26 - 28 July 2021, pp.48-51, (Full Text)

IV. Image Augmentation for Deep Learning Based Lesion Classification from Skin Images GÖÇERİ E.

The 4th IEEE International Conference on Image Processing, Applications and Systems (IPAS 2020), Cenova, Italy, 9 - 11 December 2020, pp.144-148

V. Convolutional Neural Network Based Desktop Applications to Classify Dermatological Diseases GÖÇERİ E.

The 4th IEEE International Conference on Image Processing, Applications and Systems (IPAS 2020), Cenova, Italy, 9 - 11 December 2020, pp.138-143, (Full Text)

# VI. Comparative Evaluations of CNN Based Networks for Skin Lesion Classification GÖÇERİ E., AKMAN KARAKAŞ A.

14th International Conference on Computer Graphics, Visualization, Computer Vision and Image Processing (CGVCVIP2020), Zagreb, Croatia, 23 - 25 July 2020, pp.237-242, (Full Text)

VII. Impact of Deep Learning and Smartphone Technologies in Dermatology: Automated Diagnosis GÖÇERİ E.

10th International Conference on Image Processing Theory, Tools and Applications (IPTA), ELECTR NETWORK, 9 - 12 November 2020

# VIII. Skin Disease Diagnosis from Photographs Using Deep Learning

GÖÇERİ E.

VII. Thematic Conference on Computational Vision and Medical Image Processing (VipIMAGE 2019), Porto, Portugal, 16 - 18 October 2019, vol.34, pp.239-246

#### IX. Challenges and Recent Solutions for Image Segmentation in the Era of Deep Learning GÖÇERİ E.

9th International Conference on Image Processing Theory, Tools and Applications (IPTA), İstanbul, Turkey, 6 - 09 November 2019, (Full Text)

# X. Analysis of Deep Networks with Residual Blocks and Different Activation Functions: Classification of Skin Diseases

GÖÇERİ E.

9th International Conference on Image Processing Theory, Tools and Applications (IPTA), İstanbul, Turkey, 6 - 09 November 2019, (Full Text)

XI. On The Importance of Batch Size for Deep Learning

GÖÇERİ E., Gooya A.

Conf. on Mathematics (ICOMATH2018), An Istanbul Meeting for World Mathematicians, Minisymposium on Approximation Theory Minisymposium on Math Education, İstanbul, Turkey, 3 - 06 July 2018, pp.99, (Summary

Text)

#### XII. Comparison of Weighted K-Means Clustering Approaches

GÖÇERİ E., Dura E.

International Conf. on Mathematics (ICOMATH2018), An Istanbul Meeting for World Mathematicians, Minisymposium on Approximation Theory Minisymposium on Math Education, İstanbul, Turkey, 3 - 06 July 2018, pp.98

#### XIII. Formulas Behind Deep Learning Success

GÖÇERİ E.

International Conference on Applied Analysis and Mathematical Modeling (ICAAMM2018), İstanbul, Turkey, 20 - 24 June 2018, pp.156, (Summary Text)

#### XIV. A Method for Leukocyte Segmentation Using Modified Gram-Schmidt Orthogonalization and Expectation-Maximization

GÖÇERİ E.

International Conference on Applied Analysis and Mathematical Modeling (ICAAMM2018), İstanbul, Turkey, 20 - 24 June 2018, pp.18, (Summary Text)

#### XV. Automated Measurement of Changes in Cortical Thickness from MR Images GÖCERİ E.

International Conference on Applied Analysis and Mathematical Modeling (ICAAMM2018), İstanbul, Turkey, 20 - 24 June 2018, pp.78

#### XVI. Biomedical Information Technology: Image Based Computer Aided Diagnosis Systems GÖÇERİ E., Songül C.

The 7th International Conference on Advanced Technologies (ICAT'18), Antalya, Turkey, 28 - 30 April 2018, pp.132

# XVII. Mobile Health Technologies for Patients with Mental Illness GÖÇERİ E., Songül C.

The 7th International Conference on Advanced Technologies (ICAT'18), Antalya, Turkey, 28 - 30 April 2018, pp.146

# XVIII. Adaptive Bias Field Correction: Application on Abdominal MR Images GÖÇERİ E., Dura E., Esteve J. D., GÜNAY M.

6th ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing (VipIMAGE), Porto, Portugal, 18 - 20 October 2017, vol.27, pp.102-110

### XIX. Deep Learning in Medical Image Analysis: Recent Advances and Future Trends GÖÇERİ E., GOCERI N.

Computer Graphics, Visualization, Computer Vision and Image Processing (CGVCVIP2017), Lisbon, Portugal, 20 - 23 July 2017, pp.305-310

#### XX. Intensity Normalization in Brain MR Images Using Spatially Varying Distribution Matching GÖÇERİ E.

11th International Conference on Computer Graphics, Visualization, Computer Vision and Image Processing (CGVCVIP), Lisbon, Portugal, 21 - 23 July 2017, pp.300-304

#### XXI. Computer-Based Segmentation, Change Detection and Quantification for Lesions in Multiple Sclerosis GÖÇERİ E., Songul C.

2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.177-182

### XXII. Automated Detection and Extraction of Skull from MR Head Images: Preliminary Results GÖÇERİ E., Songul C.

2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.171-176

# XXIII. Artificial neural network based abdominal organ segmentations: A review Goceri E., MARTINEZ E.

IEEE 14th International Conference on Machine Learning and Applications, ICMLA 2015, Florida, United States Of America, 9 - 11 December 2015, pp.1191-1194, (Full Text)

XXIV.	Automated detection of adenoviral conjunctivitis disease from facial images using machine learning GÜNAY M., KUCUKOGLU I., GÖÇERİ E., DANIŞMAN T., ALTURJMAN F.
	IEEE 14th International Conference on Machine Learning and Applications, ICMLA 2015, Florida, United States Of
	America, 9 - 11 December 2015, pp.1204-1209, (Full Text)
XXV.	Review on Machine Learning Based Lesion Segmentation Methods from Brain MR Images
	GÖÇERİ E., Dura E., GÜNAY M.
	15th IEEE International Conference on Machine Learning and Applications (ICMLA), California, United States Of
	America, 18 - 20 December 2016, pp.582-587
XXVI.	Machine Learning for Optimum CT-Prediction for qPCR
	GÜNAY M., GÖÇERİ E., Balasubramaniyan R.
	15th IEEE International Conference on Machine Learning and Applications (ICMLA), California, United States Of
	America, 18 - 20 December 2016, pp.588-592, (Full Text)
XXVII.	Iteratively learning a liver segmentation using probabilistic atlases: preliminary results
	Domingo J., Dura E., GÖÇERİ E.
	15th IEEE International Conference on Machine Learning and Applications (ICMLA), California, United States Of
	America, 18 - 20 December 2016, pp.593-598
XXVIII.	A Neural Network Based Kidney Segmentation from MR Images
	GÖÇERİ N., GÖÇERİ E.
	The 14th IEEE International Conference on Machine Learning and Applications (ICMLA'15), Miami, United States
	Of America, 9 - 11 December 2015, pp.1195-1198, (Full Text)
XXIX.	Automated Detection of Adenoviral Conjunctivitis Disease from Facial Images using Machine
	Learning
	GÜNAY M., GÖÇERİ E., DANIŞMAN T.
	14th IEEE International Conference on Machine Learning and Applications, Miami, United States Of America, 9 - 11
	December 2015, pp.1
XXX.	Automated Detection of Facial Disorders (ADFD): A Novel Approach Based-on Digital Photographs
	GÖÇERİ E., GÜNAY M., Alturjman F.
	The 28th International Conference of The Jangjeon Mathematical Society, Antalya, Turkey, 15 - 19 May 2015,
	pp.126
XXXI.	Effects of Chosen Scalar Products on Gradient Descent Algorithms
	GÖÇERİ E.
	The 28th International Conference of The Jangjeon Mathematical Society (ICJMS 2015), Antalya, Turkey, 15 - 19
	May 2015, pp.90, (Full Text)
XXXII.	A Level Set Method with Sobolev Gradient and Haralick Edge Detection
	GÖÇERİ E., Dura E.
	The 9th World Conference on Information Technology (WCIT 2013), Brüksel, Belgium, 26 - 27 November 2013,
	pp.5
XXXIII.	A Liver Segmentation Method Based on Partial Differential Equation and Signed Pressure Force
	Function
	GÖÇERİ E., Ünlü M., Güzeliş C., Dicle O.
	17th National Biomedical Engineering Meeting Proceedings (BIYOMUT 2012), İstanbul, Turkey, 3 - 05 October
	2012, pp.237-240
XXXIV.	An Automatic Level Set Based Liver Segmentation from MRI Data Sets
	Goceri E., UNLU M. Z., GUZELIS C., DICLE O.
	3rd International Conference on Image Processing Theory, Tools and Applications (IPTA), İstanbul, Turkey, 15 - 18
	October 2012, pp.192-197
XXXV.	Application of the Histogram Analysis in Radiation Therapy HART: An Open Source Software System
	Pyakuryal, A., Pokhrel, D., Gopalakrishnan M., Jang S., Jincong L., GÖÇERİ E., Sathiaseelan V., Mittal B.
	54th American Association of Physicsts in Medicine (AAPM) Meeting, Vancouver, Canada, 31 July - 04 August 2011,
	vol.38, no.6, pp.3678-3679, (Full Text)

XXXVI. Automatic Kidney Segmentation Using Gaussian Mixture Model on MRI Sequences

GÖÇERİ E.

International Conference on Electric and Electronics (EEIC 2011), Nanchang, China, 20 - 22 June 2011, pp.23-29, (Full Text)

#### XXXVII. Expectation Maximization And Gaussian Model Based Segmentation on Histology Slides GÖCERİ E.

The International Symposium on Computing in Informatics and Mathematics (ISCIM 2011), Tirana-Durres, Albania, 2 - 04 June 2011, pp.649-656, (Full Text)

# XXXVIII. PCA Based Bayesian Approach for Automatic Multiple Sclerosis Lesion Detection GÖÇERİ E.

The International Symposium on Computing in Informatics and Mathematics (ISCIM 2011), Tirana-Durres, Albania, 2 - 04 June 2011, pp.687-694

#### XXXIX. B-Spline Based MR and CT Image Registration for Pre-operation of Liver Transplantation GÖÇERİ E.

The International Congress on Applications and Computer Science, (CACS2010), Singapur, Singapore, 4 - 06 December 2010, pp.952-955

# XL. Liver Segmentation Techniques in MRI with Performance Analysis of Two Level Set Based Methods and A Novel Segmentation Approach

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5th National Biomechanical Congress (with international participation), İzmir, Turkey, 23 - 25 September 2010, pp.53

#### XLI. Interpolation approaches and spline based resampling for MR images Göçeri E., LOMÉNIE N.

2010 5th International Symposium on Health Informatics and Bioinformatics, HIBIT 2010, Antalya, Turkey, 20 - 22 April 2010, pp.137-143, (Full Text)

# XLII. Developing an Image Processing Application on Compression and Filtering of Multidimensional Medical Images

GÖÇERİ E., Yaldır K.

10th Integrated Design and Process Technology (IDPT-2007), Antalya, Turkey, 3 - 08 June 2007, pp.36-40

### XLIII. Sustained Image Quality When Performing Image Processing Tehcniques on Wavelet Compressed Medical Images

GÖÇERİ E., Yaldr A.

Second Annual Yök-Suny Collaboration Symposium, Scientific Collaboration For Sustainable Development, Adana, Turkey, 23 - 25 May 2007, pp.305-311, (Full Text)

# XLIV. Geliştirilmekte Olan Görüntü Sıkıştırma Standardı JPEG2000 ve Eklenen Yeni Özellikleri GÖÇERİ E., YALDIR A.

Akademik Bilişim, Kütahya, Turkey, 31 January - 02 February 2007, pp.67-72

# XLV. Geliştirilmekte Olan Görüntü Sıkıştırma Standardı JPEG2000 ve Eklenen Yeni Özellikleri. Akademik Bilişim

GÖÇERİ E., Yaldır K.

Akademik Bilişim, Kütahya, Turkey, 31 January - 02 February 2007, pp.67-72

# XLVI. Çok Boyutlu Görüntüler için JPEG2000 Standardını Destekleyen Görüntü İşleme Uygulaması GÖÇERİ E., Yaldır K.

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