Prof. Gözde Ünal

Personal Information

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International Researcher IDs
Publons / Web Of Science ResearcherID: A-2360-2013
ScopusID: 55850183600
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Biography

Dr. Gozde Unal received her BS degree from METU in 1996, her MS from Bilkent University 1998, and her PhD in ECE with a minor in Mathematics from North Carolina State University, NC, USA, in 2002. She was a postdoctoral fellow at Georgia Institute of Technology, USA, in 2002-2003. She worked as a research scientist at Siemens Corporate Research, Princeton, NJ, USA between 2003-2007. She was a faculty member in Sabanci University, Faculty of Engineering and Natural Sciences between 2007-2015. Since 2015, she is with the Computer Engineering Department of Istanbul Technical University, where she is currently a full professor. Her research interests are in computer vision and brain image analysis. Prof. Unal was the recipient of Marie Curie Alumni Career Award in 2017, L'Oreal Turkey's Women Scientist Award in 2010 in Life Sciences and Distinguished Young Scientist Award (GEBİP) from Turkish Academy of Sciences (TÜBA) in 2010.

Education Information

Doctorate, North Carolina State University, Electrical And Computer Engineering, United States Of America 1998 - 2002
Postgraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering And Natural And Applied Sciences, Turkey 1996 - 1998
Undergraduate, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1992 - 1996

Foreign Languages

English

Dissertations

Doctorate, Curve and Polygon Evolution Techniques for Image Processing, North Carolina State University, Electrical And Computer Engineering, 2002
Postgraduate, Novel Methods in Image Halftoning, İhsan Doğramacı Bilkent Üniversitesi, Mühendislik Ve Fen Bilimleri Fakültesi, 1998

Research Areas

Technical Sciences, Computer Sciences, Computer Vision, 3D Impressions, Computer Vision

Academic Titles / Tasks

Professor, Istanbul Technical University, Bilgisayar ve Bilişim, Bilgisayar Mühendisliği, 2017 - 2020

Associate Professor, Istanbul Technical University, Bilgisayar ve Bilişim, Bilgisayar Mühendisliği, 2015 - 2017

Associate Professor, Sabanci University, Faculty Of Engıneerıng And Natural Scıences, Department Of Natural Scıences And Engıneerıng Program, 2011 - 2015

Assistant Professor, Sabanci University, Faculty Of Engıneerıng And Natural Scıences, 2007 - 2011

Lecturer PhD, Georgia Institute of Technology, School Of Electrical Engineering, Electrical And Computer Engineering, 2002 - 2003

Research Assistant, North Carolina State University, School Of Electrical And Computer Engineering, Electrical And Computer Engineering, 1998 - 2002

Research Assistant, Ihsan Dogramaci Bilkent University, Faculty Of Engıneerıng, Department Of Electrıcal And Electronıcs Engıneerıng, 1996 - 1998

Courses

PROBABİLİTY THEORY AND STOCHASTİC PROCESSES, Postgraduate, 2016 - 2017, 2015 - 2016

Computer Vision, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

I. <p>Single image depth estimation: An overview
</p>
Mertan A., Duff D. J., Unal G.
DIGITAL SIGNAL PROCESSING, vol.123, 2022 (SCI-Expanded)

II. **Exploring DeshuffleGANs in Self-Supervised Generative Adversarial Networks**
Baykal Can G., Ozcelik F., Ünal G.
PATTERN RECOGNITION, vol.122, 2022 (SCI-Expanded)

III. **ODFNet: Using orientation distribution functions to characterize 3D point clouds**
Şahin Y. H., Mertan A., Ünal G.
Computers and Graphics (Pergamon), vol.102, pp.610-618, 2022 (SCI-Expanded)

IV. **Detecting visual design principles in art and architecture through deep convolutional neural networks**
Demir G., Cekmis A., Yesilkaynak V. B., Ünal G.
AUTOMATION IN CONSTRUCTION, vol.130, 2021 (SCI-Expanded)

V. **CHAOS Challenge- combined (CT-MR) healthy abdominal organ segmentation**
Kavur A. E., GEZER N. S., Baris M., ASLAN S., Conze P., Groza V., Duc Duy Pham D. D. P., Chatterjee S., Ernst P., Ozkan S., et al.
MEDICAL IMAGE ANALYSIS, vol.69, 2021 (SCI-Expanded)

VI. **Rethinking CNN-Based Pansharpening: Guided Colorization of Panchromatic Images via GANs**
Ozcelik F., Algancı U., Sertel E., Ünal G.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.59, no.4, pp.3486-3501, 2021 (SCI-Expanded)

VII. **Anncolvar: Approximation of Complex Collective Variables by Artificial Neural Networks for Analysis and Biasing of Molecular Simulations**
Trapl D., Horvacanin I., Mareska V., Ozcelik F., Ünal G., Spiwok V.
FRONTIERS IN MOLECULAR BIOSCIENCES, vol.6, 2019 (SCI-Expanded)

VIII. **Bandlets on Oriented Graphs: Application to Medical Image Enhancement**
Kafieh R., Rabbani H., Ünal G.
IEEE ACCESS, vol.7, pp.32589-32601, 2019 (SCI-Expanded)

IX. **Asymmetric Orientation Distribution Functions (AODFs) revealing intravoxel geometry in diffusion**

MRI

Karayumak S. C., Ozarslan E., Ünal G.

MAGNETIC RESONANCE IMAGING, vol.49, pp.145-158, 2018 (SCI-Expanded)

X. **Neighborhood resolved fiber orientation distributions (NRFOD) in automatic labeling of white matter fiber pathways**

Ugurlu D., Firat Z., Ture U., Ünal G.

MEDICAL IMAGE ANALYSIS, vol.46, pp.130-145, 2018 (SCI-Expanded)

XI. **Single-frame super resolution of remote-sensing images by convolutional neural networks**

Tuna C., Ünal G., Sertel E.

INTERNATIONAL JOURNAL OF REMOTE SENSING, vol.39, no.8, pp.2463-2479, 2018 (SCI-Expanded)

XII. **Guest editorial of the IJCARS MICCAI 2016 special issue**

Ourselin S., Sabuncu M. R., Wells W., Joskowicz L., Ünal G., Maier A.

INTERNATIONAL JOURNAL OF COMPUTER ASSISTED RADIOLOGY AND SURGERY, vol.12, no.8, pp.1243-1244, 2017 (SCI-Expanded)

XIII. **Semi-automated detection of anterior cruciate ligament injury from MRI**

Stajduhar I., Mamula M., Miletic D., Uenal G.

COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, vol.140, pp.151-164, 2017 (SCI-Expanded)

XIV. **Targeted vessel reconstruction in non-contrast-enhanced steady-state free precession angiography**

Ilicak E., Cetin S., Bulut E., Oguz K. K., Saritas E. U., Ünal G., Cukur T.

NMR IN BIOMEDICINE, vol.29, no.5, pp.532-544, 2016 (SCI-Expanded)

XV. **Landmarks inside the shape: Shape matching using image descriptors**

Guler R. A., Tari S., Unal G.

PATTERN RECOGNITION, vol.49, pp.79-88, 2016 (SCI-Expanded)

XVI. **A Higher-Order Tensor Vessel Tractography for Segmentation of Vascular Structures**

Cetin S., Unal G.

IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.34, no.10, pp.2172-2185, 2015 (SCI-Expanded)

XVII. **The Multimodal Brain Tumor Image Segmentation Benchmark (BRATS)**

Menze B. H., JAKAB A., Bauer S., Kalpathy-Cramer J., FARAHANI K., KIRBY J., Burren Y., Porz N., Slotboom J., Wiest R., et al.

IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.34, no.10, pp.1993-2024, 2015 (SCI-Expanded)

XVIII. **Screened Poisson Hyperfields for Shape Coding**

Guler R. A., Tari S., Unal G.

SIAM JOURNAL ON IMAGING SCIENCES, vol.7, no.4, pp.2558-2590, 2014 (SCI-Expanded)

XIX. **Standardized evaluation framework for evaluating coronary artery stenosis detection, stenosis quantification and lumen segmentation algorithms in computed tomography angiography**

Kirisli H. A., SCHAAP M., METZ C. T., DHARAMPAL A. S., MEIJBOOM W. B., PAPADOPOULOU S. L., DEDIC A., NIEMAN K., DE GRAAF M. A., Meijs M. F. L., et al.

MEDICAL IMAGE ANALYSIS, vol.17, no.8, pp.859-876, 2013 (SCI-Expanded)

XX. **Template-based CTA to x-ray angio rigid registration of coronary arteries in frequency domain with automatic x-ray segmentation**

Aksoy T., Unal G., DEMIRCI S., NAVAB N., Degertekin M.

MEDICAL PHYSICS, vol.40, no.10, 2013 (SCI-Expanded)

XXI. **An IVUS image-based approach for improvement of coronary plaque characterization**

Taki A., ROODAKI A., SETAREHDAN S. K., AVANSARI S., Unal G., NAVAB N.

COMPUTERS IN BIOLOGY AND MEDICINE, vol.43, no.4, pp.268-280, 2013 (SCI-Expanded)

XXII. **Vessel Tractography Using an Intensity Based Tensor Model With Branch Detection**

Cetin S., Demir A., Yezzi A., Degertekin M., Unal G.

IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.32, no.2, pp.348-363, 2013 (SCI-Expanded)

XXIII. **Translation, Scale, and Deformation Weighted Polar Active Contours**

Baust M., Yezzi A., Unal G., NAVAB N.

JOURNAL OF MATHEMATICAL IMAGING AND VISION, vol.44, no.3, pp.354-365, 2012 (SCI-Expanded)

XXIV. **Tumor-Cut: Segmentation of Brain Tumors on Contrast Enhanced MR Images for Radiosurgery Applications**
Hamamci A., KUCUK N., KARAMAN K., ENGIN K., Unal G.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.31, no.3, pp.790-804, 2012 (SCI-Expanded)

XXV. **Plant Image Retrieval Using Color, Shape and Texture Features**
Kebapci H., Yanikoglu B., Unal G.
COMPUTER JOURNAL, vol.54, no.9, pp.1475-1490, 2011 (SCI-Expanded)

XXVI. **Generating shapes by analogies: An application to hearing aid design**
Unal G., NAIN D., SLABAUGH G., FANG T.
COMPUTER-AIDED DESIGN, vol.43, no.1, pp.47-56, 2011 (SCI-Expanded)

XXVII. **Coupled Nonparametric Shape and Moment-Based Intershape Pose Priors for Multiple Basal Ganglia Structure Segmentation**
Uzunbas M. G., Soldea O., Unay D., Cetin M., Unal G., Ercil A., EKIN A.
IEEE TRANSACTIONS ON MEDICAL IMAGING, vol.29, no.12, pp.1959-1978, 2010 (SCI-Expanded)

XXVIII. **Stent implant follow-up in intravascular optical coherence tomography images**
Unal G., Gurmeric S., CARLIER S. G.
INTERNATIONAL JOURNAL OF CARDIOVASCULAR IMAGING, vol.26, no.7, pp.809-816, 2010 (SCI-Expanded)

XXIX. **EFFICIENT CLASSIFICATION OF SCANNED MEDIA USING SPATIAL STATISTICS**
Unal G., Sharma G., ESCHBACH R.
INTERNATIONAL JOURNAL OF PATTERN RECOGNITION AND ARTIFICIAL INTELLIGENCE, vol.24, no.6, pp.917-946, 2010 (SCI-Expanded)

XXX. **A NEW APPROACH FOR IMPROVING CORONARY PLAQUE COMPONENT ANALYSIS BASED ON INTRAVASCULAR ULTRASOUND IMAGES**
Taki A., HETTERICH H., ROODAKI A., SETAREHDAN S. K., Unal G., RIEBER J., NAVAB N., KOENIGY A.
ULTRASOUND IN MEDICINE AND BIOLOGY, vol.36, no.8, pp.1245-1258, 2010 (SCI-Expanded)

XXXI. **3D ball skinning using PDEs for generation of smooth tubular surfaces**
Slabaugh G., Whited B., Rossignac J., FANG T., Unal G.
COMPUTER-AIDED DESIGN, vol.42, no.1, pp.18-26, 2010 (SCI-Expanded)

XXXII. **STATISTICAL REGION-BASED SEGMENTATION OF ULTRASOUND IMAGES**
Slabaugh G., Unal G., WELS M., FANG T., RAO B.
ULTRASOUND IN MEDICINE AND BIOLOGY, vol.35, no.5, pp.781-795, 2009 (SCI-Expanded)

XXXIII. **3-D shape modeling for hearing aid design**
Slabaugh G., Fang T., McBagonluri F., Zouhar A., Melkisetoglu R., Xie H., Unal G.
IEEE SIGNAL PROCESSING MAGAZINE, vol.25, no.5, pp.98-102, 2008 (SCI-Expanded)

XXXIV. **Shape-driven segmentation of the arterial wall in intravascular ultrasound images**
Unal G., BUCHER S., Carlier S., SLABAUGH G., FANG T., TANAKA K.
IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE, vol.12, no.3, pp.335-347, 2008 (SCI-Expanded)

XXXV. **Estimation of vector fields in unconstrained and inequality constrained variational problems for segmentation and registration**
Unal G., SLABAUGH G.
JOURNAL OF MATHEMATICAL IMAGING AND VISION, vol.31, no.1, pp.57-72, 2008 (SCI-Expanded)

XXXVI. **A variational approach to problems in calibration of multiple cameras**
Unal G., YEZZI A., SOATTO S., SLABAUGH G.
IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, vol.29, no.8, pp.1322-1338, 2007 (SCI-Expanded)

XXXVII. **Efficient segmentation based on Eikonal and diffusion equations**
Alvino C., Unal G., SLABAUGH G., PENY B., FANG T.
INTERNATIONAL JOURNAL OF COMPUTER MATHEMATICS, vol.84, no.9, pp.1309-1324, 2007 (SCI-Expanded)

XXXVIII. **Fast incorporation of optical flow into active polygons**
Unal G., KRIM H., YEZZI A.

IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.14, no.6, pp.745-759, 2005 (SCI-Expanded)

XXXIX. **Information-theoretic active polygons for unsupervised texture segmentation**
Unal G., YEZZI A., KRIM H.
INTERNATIONAL JOURNAL OF COMPUTER VISION, vol.62, no.3, pp.199-220, 2005 (SCI-Expanded)

XL. **Stochastic differential equations and geometric flows**
Unal G., KRIM H., YEZZI A.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.11, no.12, pp.1405-1416, 2002 (SCI-Expanded)

XLI. **Unifying probabilistic and variational estimation**
Hamza A., KRIM H., Unal G.
IEEE SIGNAL PROCESSING MAGAZINE, vol.19, no.5, pp.37-47, 2002 (SCI-Expanded)

XLII. **Restoration of error-diffused images using projection onto convex sets**
Unal G., CETIN A.
IEEE TRANSACTIONS ON IMAGE PROCESSING, vol.10, no.12, pp.1836-1841, 2001 (SCI-Expanded)

XLIII. **QR-RLS algorithm for error diffusion of color images**
Unal G., YARDIMCI Y., ARIKAN O. A., CETIN A.
OPTICAL ENGINEERING, vol.39, no.11, pp.2860-2866, 2000 (SCI-Expanded)

Articles Published in Other Journals

I. **Cellular automata segmentation of brain tumors on post contrast MR images.**
HAMAMCI A., Unal G., KUCUK N., ENGIN K.
Medical image computing and computer-assisted intervention : MICCAI ... International Conference on Medical
Image Computing and Computer-Assisted Intervention, vol.13, pp.137-46, 2010 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Proceedings of the Medical Image Computing and Computer-Assisted Intervention – MICCAI 2016**
Ourselin S., Joskowicz L., Sabuncu M., Ünal G., Wells W.
Springer-Verlag , New York, 2016

II. **Vessel Orientation Constrained Quantitative Susceptibility Mapping (QSM) Reconstruction**
Çetin S., Bilgiç B., Fan A., Holdsworth S., Ünal G.
in: Medical Image Computing and Computer Assisted Intervention, Ourselin S., Joskowicz L., Sabuncu M., Unal G.,
Wells W., Editor, Springer, London/Berlin , New York, pp.467-474, 2016

III. **Elucidating intravoxel geometry in diffusion-MRI: Asymmetric orientation distribution functions (AODFs) revealed by a cone model**
Çetin S., Özarslan E., Ünal G.
in: Proceedings of the Medical Image Computing and Computer Assisted Intervention, Navab N., Hornegger J., Wells
W.M., Frangi A.F., Editor, Springer, London/Berlin , New York, pp.231-238, 2015

IV. **A Scalable Fluctuating Distance Field: An Application to Tumor Shape Analysis**
Güler R. A., Hamamcı A., Ünal G.
in: Research in Shape Analysis, Leonard K., Tari S., Editor, Springer-Verlag , Lozan, pp.9-25, 2015

V. **Registration of Brain Tumor Images Using Hyper-Elastic Regularization**
Hamamcı A., Ünal G.
in: Computational Biomechanics for Medicine: Models, Algorithms and Implementation, Wittek A., Miller K., Nielsen
P.M.F., Editor, Springer, New York, pp.101-114, 2013

VI. **On a Stochastic Model of Geometric Snakes**
Yezzi A., Ünal G., Nain D., Tannenbaum A., Zeitouni O.
in: Handbook of Mathematical Models of Computer Vision, Paragios N., Faugeras O., Chen Y., Editor, Springer, New
York, pp.161-174, 2006

VII. **Efficient Incorporation of Flow Into Visual Motion Estimation in Tracking**
Ünal G., Yezzi A., Krim H.
in: Machine Learning and Robot Perception, Patnaik S., Jain L.C., Tzafestas G., Bannore V., Editor, Springer, New York, pp.167-202, 2005

Refereed Congress / Symposium Publications in Proceedings

I. **Facial Expressions Detection of Children with Hearing Impairment Işitme Engelli Çocuklarin Yüz Ifadeleri Tespiti**
Bozkurt M., Öncel F., Gurpinar C., Köse H., Ünal G.
30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Turkey, 15 - 18 May 2022

II. **One-Class Classification of 3D Point Clouds Using Dynamic Graph CNN**
Gencer Z., Şahin Y. H., Ünal G.
7th International Conference on Computer Science and Engineering, UBMK 2022, Diyarbakır, Turkey, 14 - 16 September 2022, pp.388-392

III. **UGQE: Uncertainty Guided Query Expansion**
Öncel F., Aygün M., Baykal G., Ünal G.
3rd International Conference on Pattern Recognition and Artificial Intelligence, ICPRAI 2022, Paris, France, 1 - 03 June 2022, vol.13363 LNCS, pp.109-120

IV. **GAN-based Intrinsic Exploration for Sample Efficient Reinforcement Learning**
Kamar D., Üre N. K., Ünal G.
14th International Conference on Agents and Artificial Intelligence (ICAART), ELECTR NETWORK, 3 - 05 February 2022, pp.264-272

V. **Synthesizing Point Cloud Data Set for Historical Dome Systems**
Gunes M. C., Mertan A., Şahin Y. H., Ünal G., Özkar M.
19th International Conference on Computer-Aided Architectural Design (CAAD) - Design Imperatives - The Future is Now, ELECTR NETWORK, 16 - 18 July 2021, vol.1465, pp.538-554

VI. **Tuning Accuracy-Diversity Trade-off in Neural Network Ensemble via Novel Entropy Loss Function**
Ali M. A., Şahin Y. H., Özögür-Akyüz S., Ünal G., Otar B. C.
13th International Conference on Electrical and Electronics Engineering, ELECO 2021, Virtual, Bursa, Turkey, 25 - 27 November 2021, pp.365-368

VII. **Uncertainty-Based Dynamic Graph Neighborhoods for Medical Segmentation**
Demir U., Ozer A., Şahin Y. H., Ünal G.
4th International Workshop on Predictive Intelligence in Medicine, PRIME 2021, held in conjunction with 24th International Conference on Medical Image Computing and Computer Assisted Intervention, MICCAI 2021, Virtual, Online, 01 October 2021, vol.12928 LNCS, pp.255-265

VIII. **A New Distributional Ranking Loss With Uncertainty: Illustrated in Relative Depth Estimation**
Mertan A., Şahin Y. H., Duff D. J., Ünal G.
8th International Conference on 3D Vision (3DV), ELECTR NETWORK, 25 - 28 November 2020, pp.1079-1088

IX. **DESHUFFLEGAN: A SELF-SUPERVISED GAN TO IMPROVE STRUCTURE LEARNING**
Baykal G., Ünal G.
IEEE International Conference on Image Processing (ICIP), ELECTR NETWORK, 25 - 28 September 2020, pp.708-712

X. **Semantic Segmentation with Extended DeepLabv3 Architecture**
Yurtkulu S. C., ŞAHİN Y. H., ÜNAL G.
Sinyal İşleme ve Uygulamaları Konferansı, Turkey, 24 - 26 April 2019

XI. **Supervised Classification of White Matter Fibers Based on Neighborhood Fiber Orientation Distributions Using an Ensemble of Neural Networks**
Ugurlu D., Firat Z., Ture U., Ünal G.

21st International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI) / 8th Eurographics Workshop on Visual Computing for Biology and Medicine (VCBM) / International Workshop on Computational Diffusion MRI (CDMRI), Granada, Nicaragua, 16 - 21 September 2018, pp.143-154

XII. **Turkish lira banknotes classification using deep convolutional neural networks**
BAYKAL G., DEMİR U., SHYTI I., ÜNAL G.
2018 26th Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

XIII. **A convolutional neural networks oriented approach for voxel-based 3D object classification**
Sırma R., Dinar B., ŞAHİN Y. H., ÜNAL G.
2018 26th Signal Processing and Communications Applications Conference (SIU), Izmir, Turkey, Turkey, 2 - 05 May 2018

XIV. **Diffusion MRI Spatial Super-Resolution Using Generative Adversarial Networks**
Albay E., Demir U., Ünal G.
1st International Workshop on PRedictive Intelligence in MEdicine (PRIME), Granada, Nicaragua, 16 September 2018, vol.11121, pp.155-163

XV. **A RNN Based Time Series Approach for Forecasting Turkish Electricity Load**
Tokgoz A., Ünal G.
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018

XVI. **Generative Adversarial Training for MRA Image Synthesis Using Multi-contrast MRI**
Olut S., Şahin Y. H., Demir U., Ünal G.
1st International Workshop on PRedictive Intelligence in MEdicine (PRIME), Granada, Nicaragua, 16 September 2018, vol.11121, pp.147-154

XVII. **Cerebral Vessel Classification with Convolutional Neural Networks**
Şahin Y. H., Ünal G.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

XVIII. **Classification Of Brain Tissues as Lesion or Healthy By 3D Convolutional Neural Networks**
Aydogdu C. Y., Albay E., Ünal G.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

XIX. **Inpainting by Deep Autoencoders Using An Advisor Network**
Demir U., Ünal G.
25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

XX. **Resolution Enhancement of Tri-Stereo Remote Sensing Images by Super Resolution Methods**
TUNA C., Akoguz A., Ünal G., Sertel E.
Conference on Image and Signal Processing for Remote Sensing XXII, Edinburgh, Saint Helena, 26 - 28 September 2016, vol.10004

XXI. **Adaptive Reconstruction for Vessel Preservation in Unenhanced MR Angiography**
Ilicak E., Cetin S., SARITAŞ ÇUKUR E. Ü., Ünal G., ÇUKUR T.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.577-580

XXII. **Shape Deformation Measures for White Matter Fibers**
Gueler R. A., Ugurlu D., Firat Z., Ture U., Ünal G.
24th Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, 16 - 19 May 2016, pp.1277-1280

XXIII. **Manifold learning based IVUS Gating**
İşgüder G. G., Ünal G., Groher M., Navab N., Kalkan A., Değertekin M., Hetterich H., Rieber J.
Medical Imaging and Augmented Reality, Pekin, China, 19 - 20 September 2010, pp.139-148

XXIV. **Anatomical landmark based registration of contrast enhanced T1-weighted MR Images**
Demir A., Ünal G., Karaman K.
Biomedical Image Registration (WBIR), Lübeck, Germany, 11 - 13 July 2010, pp.91-103

Supported Projects

Özkar Kabakçıoğlu M., Ünal G., TUBITAK Project, Tarihi Yapıların Belgelenmesinde Fotogrametri Verisi Kullanılarak Yapı Bileşenlerinin Modellenmesine Yönelik Hesaplamalı Yöntemler Geliştirilmesi , 2020 - 2023

Üre N. K., Çakır M. A., Öğüdücü Ş., Ünal G., Eryiğit G., Tosun Kühn A., Oktuğ S. F., Kaya T., İnce G., Ovatman T., et al., Project Supported by Higher Education Institutions, Türkiye'nin Öncelikli Alanları için Yapay Zeka Teknolojileri Geliştirilmesi için Altyapı Oluşturma ve Ön Bilimsel Çalışmaları Başlatma, 2019 - 2022

Ünal G., TUBITAK Project, Danışmanlı Öğrenme İle Beyin Beyaz Cevher Yolaklarının Sınıflandırılması, 2018 - 2020

Ünal G., Şahin Y. H., Demir U., Project Supported by Higher Education Institutions, Bilgisayarla Görü Problemleri için Derin Üretici Sinir Ağları ile İyileştirilmiş Çözüm Altyapısı Oluşturulması, 2017 - 2019

Ünal G., TUBITAK Project, Advanced image guided endovascular interventions by segmentation and 3D 2D registration of cerebral angiograms, 2014 - 2017

Ünal G., TUBITAK Project, Beyinsapı Beyaz Cevher Yolaklarının Ameliyat Öncesi Ve Sonrası Değişimlerinin Difüzyon Tensör Görüntüleme Ile Analizinde Yeni Matematiksel Bilgisayar Yöntemleri, 2013 - 2016

Activities in Scientific Journals

IEEE transactions on Information Technology in Biomedicine, Committee Member, 2008 - 2013

Metrics

Publication: 78
Citation (WoS): 1638
Citation (Scopus): 2227
H-Index (WoS): 17
H-Index (Scopus): 17

Awards

Ünal G., Marie Curie Alumni Career Award, European Commission Marie Curie Alumni Association, March 2017
Ünal G., Genç Bilim Kadını Ödülü, L'OREAL Türkiye, May 2010
Ünal G., GEBİP, TÜBA, April 2010

Non Academic Experience

Siemens Corporate Research, Amerika Birleşik Devletleri