

## Asst. Prof. MURAT AYKUT

### Personal Information

**Office Phone:** [+90 462 377 3672](tel:+904623773672)

**Email:** [murat\\_aykut@ktu.edu.tr](mailto:murat_aykut@ktu.edu.tr)

**Web:** [https://avesis.ktu.edu.tr//murat\\_aykut](https://avesis.ktu.edu.tr//murat_aykut)

**Address:** Karadeniz Teknik Üniversitesi Bilgisayar Mühendisliği Bölümü Bilgisayar Bilimleri Anabilim Dalı 204.7

### International Researcher IDs

ORCID: 0000-0003-0100-6343

Publons / Web Of Science ResearcherID: AAV-9658-2020

ScopusID: 23018274700

Yoksis Researcher ID: 152658

### Education Information

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd., Turkey 2007 - 2013

Postgraduate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd., Turkey 2005 - 2007

Undergraduate, Karadeniz Technical University, Mühendislik-Mimarlık Fakültesi, Bilgisayar Mühendisliği, Turkey 2001 - 2005

### Foreign Languages

English, B1 Intermediate

### Dissertations

Doctorate, Esnek Kullanımlı Avuç İzi Bölgesine Dayalı Doğrulama Sistemlerinin Tasarım Çalışması, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd., 2013

Postgraduate, Örüntü Tanıma Amaçlı Doğrusal Olmayan Yöntemlerin Geliştirilmesi ve Uygulanması, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği Abd., 2007

### Research Areas

Computer Sciences, Computer Vision, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Engineering and Technology

### Academic Titles / Tasks

Karadeniz Technical University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2018 - Continues

Assistant Professor, Karadeniz Technical University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2014 - 2018

Research Assistant, Karadeniz Technical University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2005 - 2013

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Combining EfficientNet with ML-Decoder classification head for multi-label retinal disease classification**  
SİVAZ O., AYKUT M.  
Neural Computing and Applications, vol.36, no.23, pp.14251-14261, 2024 (SCI-Expanded)
- II. **Kernel Fisher discriminant analysis of Gabor features for online palmprint verification**  
EKİNCİ M., AYKUT M.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, no.2, pp.355-369, 2016 (SCI-Expanded)
- III. **Developing a contactless palmprint authentication system by introducing a novel ROI extraction method**  
AYKUT M., EKİNCİ M.  
IMAGE AND VISION COMPUTING, vol.40, pp.65-74, 2015 (SCI-Expanded)
- IV. **AAM-based palm segmentation in unrestricted backgrounds and various postures for palmprint recognition**  
AYKUT M., EKİNCİ M.  
PATTERN RECOGNITION LETTERS, vol.34, no.9, pp.955-962, 2013 (SCI-Expanded)
- V. **AAM-Based Palm Segmentation in Unrestricted Backgrounds and Various Postures for Palmprint Recognition**  
AYKUT M., EKİNCİ M.  
PATTERN RECOGNITION LETTERS, vol.34, pp.955-962, 2013 (SCI-Expanded)
- VI. **Improved gait recognition by multiple-projections normalization**  
EKİNCİ M., AYKUT M.  
MACHINE VISION AND APPLICATIONS, vol.21, no.2, pp.143-161, 2010 (SCI-Expanded)
- VII. **Palmprint recognition by applying wavelet-based kernel PCA**  
EKİNCİ M., AYKUT M.  
JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY, vol.23, no.5, pp.851-861, 2008 (SCI-Expanded)
- VIII. **Human gait recognition based on kernel PCA using projections**  
Ekinci M., Aykut M.  
JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY, vol.22, no.6, pp.867-876, 2007 (SCI-Expanded)
- IX. **Human Gait Recognition Based on Kernel PCA Using Projections**  
EKİNCİ M., AYKUT M.  
JOURNAL OF COMPUTER SCIENCE AND TECHNOLOGY, vol.22, pp.867-876, 2007 (SCI-Expanded)
- X. **Gabor-based kernel PCA for palmprint recognition**  
Ekinci M., Aykut M.  
ELECTRONICS LETTERS, vol.43, no.20, pp.1077-1079, 2007 (SCI-Expanded)

## Articles Published in Other Journals

- I. **EEG İşaretlerinde Boyut İndirgeme Algoritmalarının Karşılaştırılması**  
ÖZSANDIKCIOĞLU Ü., ATASOY A., KABLAN Y., SEVİM Y., AYKUT M.  
Akıllı Sistemler ve Uygulamaları Dergisi, vol.1, no.1, pp.140-144, 2018 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

- I. **Touchscreen swipe based biometric authentication using spectral regression - Kernel discriminant analysis Spektral regresyon - Çekirdek diskriminant analizi kullanarak dokunmatik ekran kaydirmaya dayali biyometrik kimlik doğrulama**

SİVAZ O., AYKUT M.

29th IEEE Conference on Signal Processing and Communications Applications, SIU 2021, Virtual, Istanbul, Turkey, 9 - 11 June 2021

- II. **Kaydırma Biyometriği ile Kişilerin Doğrulaması için Çekirdek Fisher Ayırtacına Dayalı Yeni Bir Yaklaşım**  
SİVAZ O., AYKUT M.  
Human-Computer Interaction, Optimization and Robotic Applications (HORA 2019), Ürgüp, Turkey, 5 - 07 July 2019
- III. **An Improvement on GrabCut with CLAHE for the Segmentation of the Objects with Ambiguous Boundaries**  
AYKUT M., AKTÜRK S. M.  
Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 27 - 29 June 2018, vol.10882, pp.116
- IV. **An Improvement on GrabCut Interactive Segmentation Method Based on Input Color Spaces**  
Aktürk S. M., AYKUT M.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- V. **Comparison of Dimension Reduction Algorithms on EEG Signals**  
Özsandıkciöğlü Ü., Atasoy A., Kablan Y., Sevim Y., Aykut M.  
Akıllı Sistemlerde Yenilikler ve Uygulamalar (ASYU) Konferansı 2017, Antalya, Turkey, 5 - 07 October 2017
- VI. **EEG İşaretlerinde Boyut İndirgeme Algoritmalarının Karşılaştırılması**  
ÖZSANDIKCIOĞLU Ü., KABLAN Y., ATASOY A., SEVİM Y., AYKUT M.  
Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Antalya, Turkey, 5 - 07 October 2017, pp.1-4
- VII. **Neighbourhood-Based Collaborative Filtering Approach Using K-means Clustering**  
MAKUL Ö., AYDOĞDU M. C., AYKUT M., EKİNCİ M.  
INTERNATIONAL CONFERENCE ON IMAGE PROCESSING, PRODUCTION AND COMPUTER SCIENCE, Londra, United Kingdom, 26 - 27 March 2016, pp.57-61
- VIII. **GABOR TABANLI ÇEKİRDEK FİŞER AYIRTACININ ONLİNE AVUÇ İZİ DOĞRULAMA SİSTEMİNE UYGULANMASI**  
AYKUT M., EKİNCİ M.  
IEEE SIU 2011, 19. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Antalya, Turkey, 20 - 22 April 2011, pp.321-325
- IX. **Avuç izi Biyometrisine Dayalı Kimlik Doğrulama Sistemi**  
AYKUT M., EKİNCİ M.  
IEEE SIU'2010, 17. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Diyarbakır, Turkey, 22 - 24 April 2010, pp.156-159
- X. **Avuç İzine Dayalı Online Kimlik Doğrulama Sistemi**  
AYKUT M., GEDİKLİ E., EKİNCİ M.  
18. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Turkey, 22 - 24 April 2010
- XI. **Gabor Dalgacık Vektörlerine Farklı Boyutlardaki Kernel Matrisinin Uygulanmasıyla Avuç İzi Tanıma**  
AYKUT M., EKİNCİ M.  
IEEE SIU'2009, 17. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Antalya, Turkey, 9 - 11 April 2009, pp.347-401
- XII. **Palmprint Recognition with Applying Different Kernel Matrix Sizes on Gabor Wavelet Features**  
AYKUT M., EKİNCİ M.  
IEEE 17th Signal Processing and Communications Applications Conference, Antalya, Turkey, 9 - 11 April 2009, pp.499-502
- XIII. **Kernel Principal Component Analysis of Gabor Features for Palmprint Recognition**  
AYKUT M., EKİNCİ M.  
3rd IAPR/IEEE International Conference on Advances in Biometrics, Alghero, Italy, 2 - 05 June 2009, vol.5558, pp.685-694
- XIV. **Palmprint Recognition Using Kernel PCA of Gabor Features**  
EKİNCİ M., AYKUT M.  
23rd International Symposium on Computer and Information Sciences (ISCIS), İstanbul, Turkey, 27 - 29 October

2008, pp.106-107

- XV. **Dalgacık Tabanlı Kernel PCA Uygulayarak Avuç izi Tanıma**  
AYKUT M., EKİNCİ M.  
IEEE SIU'2007, 15. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Eskişehir, Turkey, 11 - 13 June 2007, pp.341-345
- XVI. **A Novel Approach for Automatic Palmprint Recognition**  
EKİNCİ M., AYKUT M.  
The 20th Canadian Conference on Artificial Intelligence,, Montreal, Quebec, Canada, 28 - 30 May 2007, vol.4509, pp.122-133
- XVII. **Palmprint recognition by applying wavelet subband representation and kernel PCA**  
EKİNCİ M., AYKUT M.  
5th International Conference on Machine Learning and Data Mining in Pattern Recognition, Leipzig, Germany, 18 - 20 July 2007, vol.4571, pp.628-630
- XVIII. **A novel approach for automatic Palmpint recognition**  
EKİNCİ M., AYKUT M.  
20th Conference of the Canadian-Society-for-Computational-Studies-of-Intelligence, Montreal, Canada, 28 - 30 May 2007, vol.4509, pp.122-124
- XIX. **Palmprint recognition using wavelet based kernel PCA**  
AYKUT M., EKİNCİ M.  
IEEE 15th Signal Processing and Communications Applications Conference, Eskişehir, Turkey, 11 - 13 June 2007, pp.560-563
- XX. **Gait Recognition by Applying Multiple Projections and Kernel PCA**  
EKİNCİ M., AYKUT M., GEDİKLİ E.  
5th International Conference on Machine Learning and Data Mining in Pattern Recognition, Leipzig, Germany, 18 - 20 July 2007, vol.4571, pp.727-729
- XXI. **Yürüyüş Stiline Dayalı Kişilerin Tanınması**  
EKİNCİ M., AYKUT M.  
IEEE SIU'2006, 14. Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Antalya, Turkey, 17 - 19 April 2006, pp.312-315
- XXII. **Human identification using gait**  
EKİNCİ M., AYKUT M.  
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.257-258

## **Metrics**

Publication: 33

Citation (WoS): 146

Citation (Scopus): 209

H-Index (WoS): 7

H-Index (Scopus): 7

## **Non Academic Experience**

Karadeniz Teknik Üniversitesi