

## Assoc. Prof. AYDIN KAYA

### Personal Information

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### International Researcher IDs

ScholarID: 4xURLrgAAAAJ

ORCID: 0000-0001-6175-7769

Publons / Web Of Science ResearcherID: I-8550-2013

Yoksis Researcher ID: 35304

### Education Information

Doctorate, Hacettepe University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Dr), Turkey 2009 - 2015

Postgraduate, Hacettepe University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (YI) (Tezli), Turkey 2007 - 2009

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2002 - 2006

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Bilgisayar destekli tanı sistemi ile akciğer nodüllerinin nitelendirilmesi, Hacettepe Üniversitesi, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği (Dr), 2015

### Research Areas

Computer Sciences, Computer Vision, Computer Vision, Biomedical Engineering, Biomedical Image Processing, Biomedical Image Processing, Engineering and Technology

### Academic Titles / Tasks

Associate Professor, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2021 - Continues

Research Assistant, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2007 - 2019

### Academic and Administrative Experience

Deputy Head of Department, Hacettepe University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2021 - Continues

Deputy Head of Department, Cankaya University, Faculty Of Engineering, Department Of Computer Engineering, 2020 - 2021

## Courses

Design Project II, Undergraduate, 2021 - 2022  
Derin Öğrenme Uygulamaları, Postgraduate, 2021 - 2022  
Image Processing, Doctorate, 2021 - 2022  
Fundamentals of Image Processing, Undergraduate, 2021 - 2022  
Design Project I, Undergraduate, 2021 - 2022  
Fundamentals of Image Processing Lab., Undergraduate, 2021 - 2022  
Introduction to Programming I, Undergraduate, 2021 - 2022  
Introduction to Programming Lab. I, Undergraduate, 2021 - 2022

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

- I. **Sensor Failure Tolerable Machine Learning-Based Food Quality Prediction Model**  
KAYA A., Keceli A. S., Catal C., Tekinerdogan B.  
SENSORS, vol.20, no.11, 2020 (SCI-Expanded)
- II. **Development of a recurrent neural networks-based calving prediction model using activity and behavioral data**  
Keceli A. S., Catal C., KAYA A., Tekinerdogan B.  
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.170, 2020 (SCI-Expanded)
- III. **Analysis of transfer learning for deep neural network based plant classification models**  
KAYA A., KEÇELİ A. S., Catal C., YALIÇ H. Y., TEMUÇİN H., Tekinerdogan B.  
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.158, pp.20-29, 2019 (SCI-Expanded)
- IV. **Cascaded classifiers and stacking methods for classification of pulmonary nodule characteristics**  
Kaya A.  
Computer Methods And Programs In Biomedicine, vol.166, pp.77-89, 2018 (SCI-Expanded)
- V. **Combining 2D and 3D deep models for action recognition with depth information**  
KEÇELİ A. S., KAYA A., CAN A. B.  
SIGNAL IMAGE AND VIDEO PROCESSING, vol.12, no.6, pp.1197-1205, 2018 (SCI-Expanded)
- VI. **Depth features to recognise dyadic interactions**  
KEÇELİ A. S., KAYA A., CAN A. B.  
IET Computer Vision, vol.12, no.3, pp.331-339, 2018 (SCI-Expanded)
- VII. **Classification of radiolarian images with hand-crafted and deep features**  
KEÇELİ A. S., KAYA A., KECELI S. U.  
COMPUTERS & GEOSCIENCES, vol.109, pp.67-74, 2017 (SCI-Expanded)
- VIII. **Cyclotorsion Detection by Using Scleral Blood Vessels**  
KAYA A., KEÇELİ A. S., CAN A. B., Çakmak H. B.  
COMPUTERS IN BIOLOGY AND MEDICINE, vol.87, pp.152-161, 2017 (SCI-Expanded)
- IX. **Violent activity detection with transfer learning method**  
KEÇELİ A. S., KAYA A.  
ELECTRONICS LETTERS, vol.53, no.15, pp.1047-1048, 2017 (SCI-Expanded)
- X. **A GPU-Based Approach for Automatic Segmentation of White Matter Lesions**  
KEÇELİ A. S., CAN A. B., KAYA A.  
IETE JOURNAL OF RESEARCH, vol.63, no.4, pp.461-472, 2017 (SCI-Expanded)
- XI. **A weighted rule based method for predicting malignancy of pulmonary nodules by nodule characteristics**

## Articles Published in Other Journals

I. **Video Görüntülerinde Şiddet İçeren Aktivitelerin Lstm Ağı İle Tespiti**

KEÇELİ A. S., KAYA A.

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.21, no.63, 2019 (Peer-Reviewed Journal)

II. **Optik Akış Görüntüsü ve Bi-Lstm ile Şiddet İçeren Hareketlerin Sınıflandırılması**

KEÇELİ A. S., KAYA A.

Avrupa Bilim ve Teknoloji Dergisi, no.14, pp.204-208, 2018 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

I. **ADS-B Attack Classification using Machine Learning Techniques**

Kacem T., KAYA A., KEÇELİ A. S., ÇATAL Ç., Wijsekera D., Costa P.

2021 IEEE Intelligent Vehicles Symposium Workshops (IV Workshops), Nagoya, Japan, 11 July 2021

II. **Aşırı Öğrenme Makinesi Algoritmasını Kullanarak Yazılım Zafiyet Kestirimi**

KEÇELİ A. S., KAYA A., ÇATAL Ç., TEKİNERDOĞAN B.

Ulusal Yazılım Mühendisliği Sempozyumu, Turkey, 23 September 2019 - 25 September 2015

III. **İskelet Hacmi ve Derin Öğrenme ile Hareket Tanıma**

KEÇELİ A. S., KAYA A., CAN A. B.

2017 25TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS CONFERENCE (SIU), Antalya, Turkey, 15 - 18 May 2017

IV. **Investigation of Transfer Learning on Pulmonary Nodule Characteristics**

KAYA A., KEÇELİ A. S., CAN A. B.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

V. **Action Recognition with Skeletal Volume and Deep Learning**

KEÇELİ A. S., KAYA A., CAN A. B.

25th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 15 - 18 May 2017

VI. **Malignancy prediction by using characteristic-based fuzzy sets: A preliminary study**

KAYA A., CAN A. B.

IEEE International Conference on Fuzzy Systems, FUZZ-IEEE 2015, İstanbul, Turkey, 2 - 05 August 2015

VII. **A RARE CAUSE OF LUMBOSACRAL PLEXOPATHY: BLADDER DIVERTICULUM**

KAYA A., Bekircan-Kurt C. E., GOCMEN R., TAN E.

Biennial Meeting of the Peripheral-Nerve-Society, Quebec, Canada, 27 June - 02 July 2015, vol.20, pp.166-167

VIII. **Determining Malignancy of Small Pulmonary Nodules by Nodule Characteristics**

KAYA A., CAN A. B.

6th European Conference of the International Federation for Medical and Biological Engineering, 7 - 11 September 2014

IX. **eFis: A Fuzzy Inference Method for Predicting Malignancy of Small Pulmonary Nodules**

KAYA A., CAN A. B.

11th International Conference on Image Analysis and Recognition (ICIAR), Portugal, 22 - 24 October 2014, vol.8815, pp.255-262

X. **Designing a pattern stabilization method using scleral blood vessels for laser eye surgery**

KAYA A., CAN A. B., Çakmak H. B.

2010 20th International Conference on Pattern Recognition, ICPR 2010, İstanbul, Turkey, 23 - 26 August 2010, pp.698-701

**XI. Developing an eye tracking method for laser eye surgery Lazer göz cerrahisi için bir göz takip yöntemi geliştirilmesi**

KAYA A., CAN A. B.

2009 IEEE 17th Signal Processing and Communications Applications Conference, SIU 2009, Antalya, Turkey, 9 - 11 April 2009, pp.392-395

## **Supported Projects**

Kaya A., Temuçin H., Yalç H. Y., Keçeli A. S., TUBITAK Project, GÖRME SORUNU YAŞAYANLAR İÇİN BULUT TABANLI SOSYAL YAŞAMA YARDIMCI YAZILIM ODAKLI BİRPLATFORMUN GELİŞTİRİLMESİ, 2017 - 2019

KAYA A., Project Supported by Higher Education Institutions, 6. Uluslararası Bellek Konferansına (International Conference on Memory 2016) Katılım, 2016 - 2018

Kaya A., Temuçin H., Keçeli A. S., Yalç H. Y., KOSGEB, Görme engelli ve görme bozukluğu yaşayan kişiler için yaşam asistanı, 2015 - 2016

## **Metrics**

Publication: 27

Citation (WoS): 246

Citation (Scopus): 440

H-Index (WoS): 7

H-Index (Scopus): 6

## **Invited Talks**

A Multi-Task Deep Learning Model for Plant Disease Classification, Workshop, University of Banja Luka / SmAg Tech EXPO, Bosnia And Herzegovina, November 2021