

## **Asst. Prof. MEHMET SARIGÜL**

### **Personal Information**

**Email:** msarigul@cu.edu.tr

**Web:** <https://avesis.cu.edu.tr//msarigul>

### **Education Information**

Postgraduate, Cukurova University, Mühendislik Mimarlık Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2012 - 2015

Undergraduate, Cukurova University, Mühendislik Mimarlık Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 2005 - 2010

### **Dissertations**

Postgraduate, Q Regression Neural Network, Cukurova University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2015

### **Academic Titles / Tasks**

Assistant Professor, Cukurova University, Fen Bilimleri Enstitüsü, Bilgisayar Mühendisliği, 2023 - Continues

Assistant Professor, Iskenderun Technical University, Faculty Of Engineering And Natural Sciences, Department Of Computer Engineering, 2020 - 2023

Research Assistant, Iskenderun Technical University, Faculty Of Engineering And Natural Sciences, Department Of Computer Engineering, 2018 - 2020

Research Assistant, Cukurova University, 2014 - 2018

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

- I. **Logarithmic Learning Differential Convolutional Neural Network**  
Yasin M., SARIGÜL M., AVCI M.  
Neural Networks, vol.172, 2024 (SCI-Expanded)
- II. **Region contrastive camera localization**  
Sarigul M., Karacan L.  
PATTERN RECOGNITION LETTERS, vol.169, pp.110-117, 2023 (SCI-Expanded)
- III. **Deep Convolutional Generalized Classifier Neural Network**  
Sarigul M., ÖZYILDIRIM B. M., AVCI M.  
NEURAL PROCESSING LETTERS, vol.51, no.3, pp.2839-2854, 2020 (SCI-Expanded)
- IV. **Differential convolutional neural network**  
Sarigul M., ÖZYILDIRIM B. M., AVCI M.  
NEURAL NETWORKS, vol.116, pp.279-287, 2019 (SCI-Expanded)
- V. **Estimation of daily global solar radiation using deep learning model**  
Kaba K., Sarigul M., AVCI M., KANDIRMAZ H.  
ENERGY, vol.162, pp.126-135, 2018 (SCI-Expanded)
- VI. **Q LEARNING REGRESSION NEURAL NETWORK**  
SARIGUL M., AVCI M.

## Articles Published in Other Journals

- I. **Görüntü Sınıflandırma Görevi için CNN Kanal Dikkat Modüllerinin Performans Analizi**  
SARIGÜL M.  
Çukurova Üniversitesi Mühendislik Fakültesi dergisi, vol.38, pp.35-40, 2023 (Peer-Reviewed Journal)
- II. **Learning-Based Image Rendering**  
SOLMAZ M. K., SARIGÜL M., KARACAN L.  
Journal of Intelligent Systems with Applications, 2022 (Peer-Reviewed Journal)
- III. **Scene Construction from Depth Map Using Image-to-Image Translation Model**  
AVŞAR H., SARIGÜL M., KARACAN L.  
Journal of Intelligent Systems with Applications, 2022 (Peer-Reviewed Journal)
- IV. **Interpolation-Based Smart Video Stabilization**  
Dervişoğlu S., SARIGÜL M., KARACAN L.  
Journal of Intelligent Systems with Applications, 2021 (Peer-Reviewed Journal)
- V. **Classifying stable and unstable videos with deep convolutional networks**  
SARIGÜL M., KARACAN L.  
Journal of Intelligent Systems with Applications, 2020 (Peer-Reviewed Journal)
- VI. **Performance comparison of different momentum techniques on deep reinforcement learning**  
SARIGÜL M., AVCI M.  
JOURNAL OF INFORMATION AND TELECOMMUNICATION, vol.2, no.2, pp.205-216, 2018 (Peer-Reviewed Journal)
- VII. **Comparison of Different Deep Structures for Fish Classification**  
SARIGÜL M., AVCI M.  
International Journal of Computer Theory and Engineering, vol.9, no.5, pp.362-366, 2017 (Peer-Reviewed Journal)
- VIII. **Position resolution study at high energies of a sampling electromagnetic calorimeter whose active material is a scintillator with Peroxide-cured polysiloxane base**  
Aydin G., Sarigul M., Sarigul H.  
NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT, vol.955, 1 (Peer-Reviewed Journal)
- IX. **A survey on digital video stabilization**  
Sarigul M.  
MULTIMEDIA TOOLS AND APPLICATIONS, 1 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Case Study: Deep Convolutional Networks in Healthcare**  
Avcı M., Sarigül M., Özyıldırım B. M.  
in: Development and Analysis of Deep Learning Architectures, Pedrycz Witold, Chen Shyi-Ming, Editor, Springer, pp.61-89, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **AN OPTIMIZATION-BASED VIDEO STABILIZATION APPROACH**  
Dervişoğlu S., SARIGÜL M., KARACAN L.  
6th INTERNATIONAL ICONTECH CONFERENCE ON INNOVATIVE SURVEYS IN POSITIVE SCIENCES, Rijeka, Croatia, 04 December 2022, pp.145-149
- II. **Görüntü Tabanlı Kamera Konumlandırma İçin Farklı Eniyileme Tekniklerinin Başarım**

## Değerlendirmesi

SOLMAZ M. K., SARIGÜL M., KARACAN L.

Sinyal İşleme ve İletişim Uygulamaları Kurultayı, Karabük, Turkey, 15 May 2022

### III. Learning-Based Image Rendering

SOLMAZ M. K., SARIGÜL M., KARACAN L.

4. International Conference on Artificial Intelligence towards Industry 4.0, Hatay, Turkey, 11 - 12 November 2021

### IV. Scene Construction from Depth Map Using Image-to-Image Translation Model

Avşar H., SARIGÜL M., KARACAN L.

4. International Conference on Artificial Intelligence towards Industry 4.0, Hatay, Turkey, 11 - 12 November 2021

### V. Interpolation-based smart video stabilization

Dervişoğlu S., SARIGÜL M., KARACAN L.

4. International Conference on Artificial Intelligence towards Industry 4.0, Hatay, Turkey, 11 - 12 November 2021

### VI. Classifying Stable and Unstable Videos with Deep Convolutional Networks

SARIGÜL M., KARACAN L.

3. International Conference on Artificial Intelligence towards Industry 4.0, 12 - 13 November 2020

### VII. Pattern transfer between images of different species of butterflies using CycleGan

SARIGÜL M.

International Conference on Artificial Intelligence towards Industry 4.0, 14 - 16 November 2019

### VIII. Image compression with deep autoencoders on bird images

SARIGÜL M., AVCI M.

International Conference on Artificial Intelligence towards Industry 4.0, 15 - 17 November 2018

### IX. Effect of pre-trained deep neural network usage on performance of image classification

SARIGÜL M., AVCI M.

2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), 25 - 27 October 2017

### X. Performance Analysis of Different Convolutional Neural Network Structures on Bird Classification

SARIGÜL M., AVCI M.

2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), 25 - 27 October 2017

### XI. Performance Comparison of Different Momentum Techniques on Deep Reinforcement Learning

SARIGÜL M., AVCI M.

IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Gdynia, Poland, 3 - 05 July 2017, pp.302-306

## Supported Projects

Ata B., Sarıgül M., Karacan L., TUBITAK Project, Large Language Model-Enhanced Visual Simultaneous Localization and Mapping for Robot Task and Motion Planning, 2024 - 2027

Sarıgül M., Karacan L., TUBITAK Project, Seri Çekim Görüntülerinin Görüntü İyileştirmesinde ve Restorasyonunda Difüzyon Olasılıksal Modellerin Kullanımı, 2024 - 2026

Sarıgül M., Karacan L., TUBITAK Project, Self-Supervised Deep Learning Approach for Video Stabilization , 2021 - 2023

## Scientific Research / Working Group Memberships

Cukurova A1, Cukurova University, Türkiye, <https://cukurovaai.github.io/>, 2023 - Continues

## Metrics

Publication: 27

Citation (WoS): 210

Citation (Scopus): 243

H-Index (WoS): 3

H-Index (Scopus): 4