

## Asst. Prof. MEHMET SÜLEYMAN YILDIRIM

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-9901-2021

ScopusID: 57205611805

Yoksis Researcher ID: 41802



### Education Information

2019 - 2022	Doctorate, Bilecik Seyh Edebali University, Fen Bilimleri Enstitüsü, Elektronik Ve Bilgisayar Mühendisliği (Dr), Turkey
2017 - 2019	Undergraduate, Bilecik Seyh Edebali University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey
2006 - 2009	Postgraduate, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Elektronik Bilgisayar Eğitimi (Y) (Tezli), Turkey
2001 - 2005	Undergraduate, Suleyman Demirel University, Teknik Eğitim Fakültesi, Elektronik Ve Bilgisayar Eğitimi Bölümü, Turkey

### Dissertations

2022	MR taramaları üzerinde derin öğrenme modelleri kullanılarak multipl skleroz lezyonlarının otomatik tespiti ve değişiminin takibi, Bilecik Seyh Edebali University, FEN BİLİMLERİ ENSTİTÜSÜ, Elektronik Ve Bilgisayar Mühendisliği (Dr), Doctorate
2009	Lojik denklem sadeleştirme için internet temelli ölçme sistemi, Suleyman Demirel University, Fen Bilimleri Enstitüsü, Elektronik Bilgisayar Eğitimi (Y) (Tezli), Postgraduate

### Research Areas

Image and Video Processing, Computer Vision, Computer Learning, Pattern Recognition and Image Processing, Biomedical Image Processing

### Academic Titles / Tasks

2022 - Continues	Assistant Professor, Bilecik Seyh Edebali University, Söğüt Meslek Yüksekokulu, Bilgisayar Teknolojileri
2008 - 2022	Lecturer, Bilecik Seyh Edebali University, Söğüt Meslek Yüksekokulu, Bilgisayar Teknolojileri

## Academic and Administrative Experience

2023 - Continues	Head of Department, Bilecik Seyh Edebali University, Söğüt Meslek Yüksekokulu, Bilgisayar Teknolojileri
2021 - Continues	Erasmus Program Institutional Coordinator, Bilecik Seyh Edebali University, Söğüt Meslek Yüksekokulu, Bilgisayar Teknolojileri
2014 - 2016	Assistant Director of Vocational School, Bilecik Seyh Edebali University, Söğüt Meslek Yüksekokulu, Bilgisayar Teknolojileri

## Courses

2023 - 2024, 2022 - 2023, 2021 - 2022, 2017 - 2018	Nesne Yönelimli Programlama, Associate Degree
2023 - 2024	İnternet Programlama, Undergraduate
2023 - 2024, 2022 - 2023, 2021 - 2022	Bilgisayar Programlama II, Undergraduate
2024 - 2025, 2023 - 2024, 2022 - 2023, 2021 - 2022	Bilgisayar Programlama I, Undergraduate
2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018	Web Tasarımının Temelleri, Associate Degree
2022 - 2023, 2021 - 2022, 2020 - 2021, 2019 - 2020	Programlamanın Temelleri, Associate Degree
2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018	Web Programcılığı, Associate Degree
2021 - 2022, 2020 - 2021, 2019 - 2020, 2018 - 2019, 2017 - 2018	Programlama Dilleri, Associate Degree
2020 - 2021	Nesne Yönelimli Programlama ile Uygulama Geliştirme, Associate Degree
2020 - 2021, 2019 - 2020	İleri Web Programlama, Associate Degree

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

- Fully Automated Detection of the Appendix Using U-Net Deep Learning Architecture in CT Scans**  
Tiryaki Baştuğ B., Güneri G., Yıldırım M. S., Çorbacı K., Dandil E.  
JOURNAL OF CLINICAL MEDICINE, vol.13, no.19, 2024 (SCI-Expanded)
- MaskAppendix: Backbone-Enriched Mask R-CNN Based on Grad-CAM for Automatic Appendix Segmentation**  
Dandil E., Tiryaki Baştuğ B., Yıldırım M. S., Çorbacı K., Güneri G.  
DIAGNOSTICS, vol.14, no.21, pp.1-21, 2024 (SCI-Expanded)
- FractalSpiNet: Fractal-Based U-Net for Automatic Segmentation of Cervical Spinal Cord and MS Lesions in MRI**

POLATTİMUR R., DANDIL E., YILDIRIM M. S., ULUÇAY S., Şenol U.  
IEEE Access, vol.12, pp.110955-110976, 2024 (SCI-Expanded)

- IV. **Automated liver segmentation using Mask R-CNN on computed tomography scans Bilgisayarlı tomografi taramaları üzerinde maskeli bölgesel-evrimsel sinir ağları ile karaciğerin otomatik bölütlenmesi**

DANDIL E., YILDIRIM M. S., SELVİ A. O., Uzun S.

Journal of the Faculty of Engineering and Architecture of Gazi University, vol.37, no.1, pp.29-46, 2022 (SCI-Expanded)

- V. **Automatic detection of multiple sclerosis lesions using mask R-CNN on magnetic resonance scans**

YILDIRIM M. S., DANDIL E.

IET Image Processing, vol.14, no.16, 2020 (SCI-Expanded)

## Articles Published in Other Journals

- I. **A Hybrid Method Based on Feature Fusion for Breast Cancer Classification using Histopathological Images**

DANDIL E., SELVİ A. O., ÇEVİK K. K., YILDIRIM M. S., UZUN S.

Avrupa Bilim ve Teknoloji Dergisi, 2021 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Fully Automated Segmentation of Brain Stroke Lesions Using Mask Region- Based Convolutional Neural Network**

DANDIL E., YILDIRIM M. S.

in: Diagnosis of Neurological Disorders Based on Deep Learning Techniques, Chaki Jyotismita, Editor, CRC Press (Taylor & Francis Group, LLC), pp.113, 2023

- II. **Detection of Breast Cancer Using Deep Neural Networks with Transfer Learning on Histopathological Images**

ÇEVİK K. K., DANDIL E., UZUN S., SELVİ A. O., YILDIRIM M. S.

in: Artificial Intelligence for Data-Driven Medical Diagnosis, Deepak Gupta, Utku Kose, Bao Le Nguyen, Siddhartha Bhattacharyya, Editor, Walter de Gruyter GmbH, Berlin, pp.245-264, 2021

## Refereed Congress / Symposium Publications in Proceedings

- I. **Fully automated axial plane segmentation of cervical spinal cord using U-Net in MR scans**

POLATTİMUR R., DANDIL E., YILDIRIM M. S., ŞENOL A. U., TEZEL MERSİNLİOĞLU Z. E., SELVİ A. O., CANBAZ KABAY S.

7th International Symposium on Innovative Approaches in Smart Technologies, 23 November 2023, pp.1-7

- II. **Automatic Segmentation of COVID-19 Infection on Lung CT Scans using Mask R-CNN**

DANDIL E., YILDIRIM M. S.

4th International Congress on Human-Computer Interaction, Optimization and Robotic Applications, HORA 2022, Ankara, Turkey, 9 - 11 June 2022

- III. **Automated Multiple Sclerosis Lesion Segmentation on MR Images via Mask R-CNN**

YILDIRIM M. S., DANDIL E.

2021 5th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Ankara, Turkey, 21 October 2021

- IV. **A Hybrid Method Based on Feature Fusion for Breast Cancer Classification using Histopathological Images**

DANDIL E., SELVİ A. O., ÇEVİK K. K., YILDIRIM M. S., UZUN S.

5th International Symposium on Multidisciplinary Studies and Innovative Technologies, Ankara, Turkey, 21 - 23 October 2021, pp.23

- V. **A Mask R-CNN based approach for automatic lung segmentation in computed tomography scans**  
DANDIL E., YILDIRIM M. S.  
2021 International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2021, Kocaeli, Turkey, 25 - 27 August 2021
- VI. **DeepMSWeb: A Web-Based Decision Support System via Deep Learning for Automatic Detection of MS Lesions**  
YILDIRIM M. S., DANDIL E.  
2nd International Informatics and Software Engineering Conference, IISEC 2021, Ankara, Turkey, 16 - 17 December 2021
- VII. **Daha Hızlı Bölgesel-Evrşimsel Sinir Ağları Kullanarak Akciğer Nodüllerinin Tespiti**  
DANDIL E., YILDIRIM M. S.  
2nd International Conference on Data Science and Applications (ICONDATA'19), Balıkesir, Turkey, 3 - 06 October 2019, pp.126-132
- VIII. **Web Based Animal Tracker System**  
YILDIRIM M. S., SELVİ A. O., DANDIL E.  
2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2018, Kizilcahamam, Ankara, Turkey, 19 - 21 October 2018
- IX. **User Interface for Testing Heuristic Algorithms**  
YILDIRIM M. S., KARAKUZU C., Yıldırım Ö.  
The 15th Workshop of the EURO Working Group EU/ME: The Metaheuristic Community, İstanbul, Turkey, 24 - 25 March 2014, pp.127-131

## Supported Projects

2023 - Continues	BT Anjiyografi Görüntülerinden Koroner Damar Darlıklarının Derin Öğrenme Yöntemleri Kullanılarak Otomatik Tespiti, Project Supported by Higher Education Institutions
2023 - 2024	BT Taramalarından Akciğer Kanseri EGFR Mutasyon Durumunun Derin Öğrenme Yöntemleri İle Tahmini, Project Supported by Higher Education Institutions
2019 - 2021	Histopatolojik Görüntülerde Derin Sinir Ağları İle Göğüs Kanseri Tanıma ve Sınıflandırma Sistemi, Project Supported by Higher Education Institutions