# Artificial Intelligence

Applications in Medicine

**Editör** Fuat TÜRK





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#### Editor

Dr. Öğretim Üyesi Fuat TÜRK

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#### **Project Coordinator**

Meryem YAVUZ (MediHealth Academy)

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Fatih Şamil ULUDAĞ Dilaver Emin KORKMAZ Elif ÖZDİL (MediHealth Academy)

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Preface

Dear Colleagues,

In this book, we tried to convey to you some examples of Artificial Intelligence applications, which have an important place in the field of medicine. You can find the importance of artificial intelligence in the field of medicine, its basic applications and its future place in this book. Thanks to the revolutionary applications in the field of health, examples are presented that can easily be achieved by anyone who is interested in the subject in both engineering sciences and medicine.

Especially the increasing population of the country and the number of patients complicate the health management. Failure of the arrangements to be done correctly makes it difficult for patients to reach health services and even apply to the right centers, and makes the work of physicians very difficult at the moment of diagnosis. The contributions of artificial intelligence to physicians are a guide in many places in the health sector. In short, the aim of this book is to increase the knowledge and equipment of our physicians so that they can interpret the applications in the field of Artificial Intelligence, in addition to contributing to the engineering sciences to have better quality and comprehensive information in the field of medicine.

Before the writing process of the book, we created certain topics by examining the problems they encounter most in practice in the surveys and field studies we conducted in the field of medicine. Later, we determined Artificial Intelligence-based decision support systems for these topics. Finally, we finished the writing process of the book by contacting academicians specialized in these subjects in different universities of our country. I would like to thank all my academic friends who wrote chapters in this difficult and tiring journey for their efforts.

Our dear brother and esteemed teacher Prof. Dr. I would like to express my endless thanks to Aydın ÇİFCİ.

I would like to thank our project coordinator Meryem YAVUZ, our graphic-design responsible Fatih Şamil ULUDAĞ and Dilaver Emin KORKMAZ, who have always been with us with their support day and night throughout the whole process, and all the publishing house employees who have supported us throughout the process.

I would like to present my endless love to my dear children Mert and Ela whom I regretfully deprived of my love because of the things I have been working on and to my dear wife Elif Türk for whom I could not spare enough time due to my academic studies and intense work schedule.

On behalf of my entire team, with love and regards....

Asist. Prof. Fuat TÜRK, PhD Çankırı, 2022



## ARTIFICIAL INTELLIGENCE Applications in Medicine

# Authors

#### Ebru AYDOĞAN DUMAN

Burdur Mehmet Akif Ersoy University, Bucak Technology Faculty, Burdur

#### **Elvan DUMAN**

Burdur Mehmet Akif Ersoy University, Bucak Technology Faculty, Burdur

#### **Faruk ULAMIS**

Hacılar Hüseyin Aytemiz Vocational School, Electronics and Automation Department, Kırıkkale

#### Fuat TÜRK

Department of Computer Engineering, Faculty of Engineering and Architecture, Kırıkkale University, Kırıkkale

#### Hüseyin AYDİLEK

Kırıkkale University, Faculty of Engineering and Architecture, Department of Electrical and Electronics Engineering, Kırıkkale

#### Kali GÜRKAHRAMAN

Sivas Cumhuriyet University, Faculty of Engineering, Department of Computer Engineering, Sivas

#### Mahmut KILICASLAN

Nallihan Vocational School, Ankara

#### **Mustafa Yasin ERTEN**

Kırıkkale University, Faculty of Engineering and Architecture, Department of Electrical and Electronics Engineering, Kırıkkale

#### **Rukiye KARAKIŞ**

Sivas Cumhuriyet University, Faculty of Technology, Department of Software Engineering, Sivas

#### Ufuk TANYERİ

Nallihan Vocational School, Ankara

#### Yasin İNAĞ

Muş Alparslan university, Faculty of Engineering and Architecture, Department of Software Engineering, Muş

#### Yunus KÖKVER

Ankara University, Elmadağ Vocational School, Computer Technologies Department, Ankara

#### Zafer CİVELEK

Çankırı Karatekin University, Faculty of Engineering, Deparment of Electrical and Electronics Engineering, Çankırı

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