

# Prof. RECEP ERYİĞİT

## Personal Information

Web: <https://avesis.ankara.edu.tr/reryigit>

## International Researcher IDs

ORCID: 0000-0002-4282-6340

ScopusID: 6602419330

Yoksis Researcher ID: 200206

## Education Information

Doctorate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1998 - 2004

Postgraduate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1996 - 1998

Undergraduate, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, Turkey 1989 - 1996

## Foreign Languages

English, A2 Elementary

## Dissertations

Doctorate, Kuantum algoritmalarıyla fiziksel sistemlerin simülasyonu, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 2004

Postgraduate, C14 H11 N3 C12 ve C28 H22 N3 C13 moleküllerinin kristal yapılarının incelenmesi, Hacettepe University, Mühendislik Fakültesi, Fizik Mühendisliği Bölümü, 1998

## Research Areas

Parallel Algorithms, Software Security, Computer Vision, Quantum Calculation, Database and Data Structures, Information Storage and Retrieval, Data Representation and Storage, Data Compression, Data Structures, Database Systems, Software, Operating Systems, Automatic Programming, Programming Languages, Software Engineering, Soft Computing

## Academic Titles / Tasks

Professor, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2023 - Continues

Associate Professor, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2013 - 2023

## Courses

Programlama Dilleri, Undergraduate, 2015 - 2016, 2014 - 2015

Kuantum Bilgisayarlar, Postgraduate, 2015 - 2016

Yazılım Mühendisliği, Undergraduate, 2015 - 2016, 2014 - 2015  
Özel Konular, Undergraduate, 2015 - 2016  
Nesne Yönelimli Programlama, Undergraduate, 2015 - 2016, 2014 - 2015  
Veritabanı Yönetim Sistemleri, Postgraduate, 2014 - 2015  
Adli Bilimlerde Bilgisayar, Postgraduate, 2014 - 2015  
Araştırma Yöntemleri, Undergraduate, 2014 - 2015  
İşletim Sistemleri, Undergraduate, 2014 - 2015

## Advising Theses

Eryiğit R., DERİN ÖĞRENME YÖNTEMLERİ İLE BİTKİ SINIFLANDIRMA, Postgraduate, B.DUMAN(Student), 2022  
Eryiğit R., Sosyal Medya Üzerinden İşlenen Suçlarda Twitter Örnek Olaylarının Adli Olarak İncelenmesi, Doctorate, A.SALUK(Student), 2022  
Eryiğit R., Evrişimli sinir ağları yöntemlerini kullanarak bitki tohum ve fidelerini sınıflandırma, Postgraduate, K.ÇAĞHAN(Student), 2022  
ERYİĞİT R., A new model for online sequential learning: OS-CELM, Postgraduate, O.TOSUN(Student), 2020  
ERYİĞİT R., Bilgi sistemleri denetiminde veri tabanı sistemlerinin incelenmesi, Postgraduate, S.CANBEY(Student), 2019  
ERYİĞİT R., Karmaşık ağlarda basamaklı çökme tahmini, Postgraduate, A.TÜRK(Student), 2019  
ERYİĞİT R., Adli bilişimde inceleme süreçleri, Postgraduate, R.OĞUZ(Student), 2018  
ERYİĞİT R., Windows 7 ve 8 işletim sistemlerinde faronics deepfreeze standard programı kurululu sabit disklerin adli olarak incelenmesi, Postgraduate, A.SALUK(Student), 2016  
ERYİĞİT R., CHAID ve CART analiz yöntemlerinin uygulamalı karşılaştırılması, Postgraduate, Y.İNAĞ(Student), 2015

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

- I. **Impact of datasets on the effectiveness of MobileNet for beans leaf disease detection**  
Elfatimi E., ERYİĞİT R., Shehu H. A.  
Neural Computing and Applications, vol.36, no.4, pp.1773-1789, 2024 (SCI-Expanded)
- II. **Deep multi-scale convolutional neural networks for automated classification of multi-class leaf diseases in tomatoes**  
Elfatimi E., ERYİĞİT R., Elfatimi L.  
Neural Computing and Applications, vol.36, no.2, pp.803-822, 2024 (SCI-Expanded)
- III. **Deep Learning-Based Classification of Image Data Sets Containing 111 Different Seeds**  
Tuğrul B., Eryiğit R., Ar Y.  
Advanced Theory and Simulations, vol.6, no.11, 2023 (SCI-Expanded)
- IV. **Convolutional Neural Networks in Detection of Plant Leaf Diseases: A Review**  
Tuğrul B., Elfatimi E., Eryigit R.  
AGRICULTURE-BASEL, vol.12, no.8, 2022 (SCI-Expanded)
- V. **Beans Leaf Diseases Classification Using MobileNet Models**  
Elfatimi E., Eryiğit R., Elfatimi L.  
IEEE Access, vol.10, pp.9471-9482, 2022 (SCI-Expanded)
- VI. **Performance of Various Deep-Learning Networks in the Seed Classification Problem**  
ERYİĞİT R., TUĞRUL B.  
SYMMETRY-BASEL, vol.13, no.10, 2021 (SCI-Expanded)
- VII. **Optical gain model proposed with the use of artificial neural networks optimised by artificial bee colony algorithm**  
Yigit S., ERYİĞİT R., Celebi F. V.  
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS, vol.5, no.9, pp.1026-1029, 2011 (SCI-Expanded)

- VIII. **Global entanglement measures and quantum phase transitions in the 1D J<sub>1</sub>-J<sub>2</sub> model**  
Eryiğit R.  
International Journal of Theoretical Physics, vol.48, no.3, pp.885-893, 2009 (SCI-Expanded)
- IX. **Analytical study of thermal entanglement in a two-dimensional J(1)-J(2) model**  
Eryiğit R., Gündüç Y., Eryiğit R.  
PHYSICS LETTERS A, vol.358, no.5-6, pp.363-367, 2006 (SCI-Expanded)
- X. **Magnetic entanglement in J(1)-J(2) model**  
Eryiğit R., Gündüç Y., Eryiğit R.  
PHYSICS LETTERS A, vol.349, no.1-4, pp.37-44, 2006 (SCI-Expanded)
- XI. **Quantum phase transitions and entanglement in J(1)-J(2) model**  
Eryiğit R., Eryiğit R., Gündüç Y.  
INTERNATIONAL JOURNAL OF MODERN PHYSICS C, vol.15, no.8, pp.1095-1103, 2004 (SCI-Expanded)
- XII. **Ab initio vibrational and dielectric properties of chalcopyrite CuInS<sub>2</sub>**  
Eryiğit R., Parlak C., Eryiğit R.  
EUROPEAN PHYSICAL JOURNAL B, vol.33, no.3, pp.251-254, 2003 (SCI-Expanded)
- XIII. **The structure of N-(1H-benzo[d]imidazol-2-ylmethyl)-N-(2,6-dichlorophenyl)amine**  
Eryiğit R., Kendi E.  
Journal of Chemical Crystallography, vol.28, no.2, pp.145-147, 1998 (SCI-Expanded)
- XIV. **Synthesis and antimicrobial activity of some new anilino benzimidazoles.**  
Tuncbilek M., Göker A. H., Ertan R., Eryigit R., Kendi E., Altanlar N.  
Archiv der Pharmazie, vol.330, no.12, pp.372-6, 1997 (SCI-Expanded)

## Articles Published in Other Journals

- I. **New Digital Forensics Investigation Process (NDFIP)**  
OĞUZ R., ERYİĞİT R.  
Fırat Üniversitesi Mühendislik Bilimleri Dergisi, vol.36, no.2, pp.717-724, 2024 (Peer-Reviewed Journal)
- II. **Machine Learning-Based Prediction of Crime Rates from Economic Data: Analytical Research**  
GENÇAY A., ERYİĞİT R.  
Türkiye Klinikleri Adli Tıp ve Adli Bilimler Dergisi, vol.21, no.1, pp.21-35, 2024 (Peer-Reviewed Journal)
- III. **Classification of Guava Leaf Disease using Deep Learning**  
DOUTOUM A. S., ERYİĞİT R., TUĞRUL B.  
World Scientific and Engineering Academy and Society (WSEAS), vol.20, no.38, pp.356-363, 2023 (Peer-Reviewed Journal)
- IV. **Classification of Trifolium Seeds by Computer Vision Methods**  
Eryiğit R., Ar Y., Tuğrul B.  
WSEAS Transactions on Systems, vol.22, pp.313-320, 2023 (Scopus)
- V. **ESTIMATING CO<sub>2</sub> EMISSIONS BY USING ENERGY INTENSITY DATA OF OECD COUNTRIES**  
Eryigit R., gunduc s.  
Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.61, no.1, pp.68-75, 2019 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Convolutional Neural Networks in Detection of Plant Leaf Diseases: A Review**  
TUĞRUL B., Elfatimi E., ERYİĞİT R.  
in: Advances in Agricultural Engineering Technologies and Application, Sultan Muhammad, Shamshiri Redmond R., Ahamed Md Shamim, Farooq Muhammad, Editor, Academic Open Access Publishing, pp.245-265, 2023

## Refereed Congress / Symposium Publications in Proceedings

- I. **A Comparative Study on Two Apple Leaves Datasets Captured Under Diverse Conditions**  
Doutoum A. S., ERYİĞİT R., TUĞRUL B.  
9th International Congress on Information and Communication Technology, ICICT 2024, London, England, 19 - 22 February 2024, vol.1002 LNNS, pp.237-247
- II. **Otomotiv Trendleri Veri Seti Görselleştirme Çalışması**  
Girgin İ., ERYİĞİT R., TUĞRUL B.  
6th International Symposium on Innovative Approaches in Smart Technologies, Ankara, Turkey, 08 December 2022
- III. **Convolutional Neural Network Models For Plant Seedling Classification**  
ERYİĞİT R., ÖZAYDIN K. Ç.  
8TH INTERNATIONAL ISTANBUL SCIENTIFIC RESEARCH CONGRESS, Turkey, 12 March 2022
- IV. **CONVOLUTIONAL NEURAL NETWORK MODELS FOR PLANT SEEDLING CLASSIFICATION**  
Özaydın K. Ç., Eryiğit R.  
8TH INTERNATIONAL ISTANBULSCIENTIFIC RESEARCH CONGRESS, İstanbul, Turkey, 12 - 13 March 2022, vol.1, no.3, pp.564-572
- V. **Interactive Machine Learning for Wheat Head Counting**  
TUĞRUL B., ERYİĞİT R.  
International Conference on Design, Research and Development 2021, Konya, Turkey, 15 December 2021
- VI. **Comparison of VGG and MobileNet Models for Grass Seed Dataset**  
ERYİĞİT R., TUĞRUL B.  
5th International Conference on Informatics and Computational Sciences (ICICoS), Aachen, Germany, 24 - 25 October 2021
- VII. **An analysis of imperative programming languages from data and function abstraction perspective**  
GÜNDÜÇ S., ERYİĞİT R., TUĞRUL B.  
International Conference on theoretical and applied Computer Science and Engineering, Ankara, Turkey, 10 - 12 November 2017
- VIII. **An Analysis of imperative programming languages from data and function abstraction perspective**  
GÜNDÜÇ S., TUĞRUL B., ERYİĞİT R.  
International conference on theoretical and applied computer science, 10 - 11 November 2017
- IX. **An Empirical Analysis of Early Object Oriented Design Metrics in Relation To Code Size**  
TANRIÖVER Ö. Ö., ERYİĞİT R.  
6th IEEE International Conference on Software Engineering and Service Science (ICSESS), Beijing, China, 23 - 25 September 2015, pp.62-65
- X. **A semi automatic computer aided diagnosis procedure on lung CT images**  
ERYİĞİT R., samet R., Demirpolat A.  
International Conferance ICAT'14, 14 August 2014
- XI. **S Gündüç R Eryiğit Effects of confidence and social pressure on decision making processes**  
GÜNDÜÇ S., ERYİĞİT R.  
International Conferance ICAT'14, 2014., 14 August 2014
- XII. **Does organizational justice have effect on empromvement A study in Turkish context**  
ÖZER K., AZİZOĞLU Ö., CİNDİLLİOĞLU M., ERYİĞİT R.  
International Conference on Business, Economics and Accounting, 18 May 2014

## Scientific Refereeing

IEEE ACCESS, Journal Indexed in SCI-E, May 2023

## **Metrics**

Publication: 41

Citation (WoS): 266

Citation (Scopus): 230

H-Index (WoS): 7

H-Index (Scopus): 9