

Office Phone: [+90 462 377 3680](tel:+904623773680)

Email: tberber@ktu.edu.tr

Other Email: tolga.berber@fen.ktu.edu.tr

Web: <https://avesis.ktu.edu.tr/tberber>

Address: Karadeniz Teknik Üniversitesi Fen Fakültesi İstatistik ve Bilgisayar Bilimleri Bölümü 61080 TRABZON

International Researcher IDs

ORCID: 0000-0002-6487-5581

Publons / Web Of Science ResearcherID: L-9328-2017

Yoksis Researcher ID: 28142

Education Information

- I. Doctorate, Dokuz Eylül University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 2007 - 2013
- II. Postgraduate, Dokuz Eylül University, Faculty Of Engineering, Department Of Computer Engineering, Turkey 2003 - 2007
- III. Undergraduate, Karadeniz Technical University, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri, Turkey 1998 - 2002

Foreign Languages

- I. English, C1 Advanced

Certificates, Courses and Trainings

- I. Education Management and Planning, Ufuk 2020'de TÜRKİYE Genel Eğitimi, TÜBİTAK, 2016
- II. Education Management and Planning, Fen Bilimlerinde Araştırma Projesi Hazırlama Eğitimi, TÜBİTAK, 2014

Dissertations

- I. Doctorate, Integration of Content-Based Image Retrieval and Database Management System: A Case Study with Digital Mammography, Dokuz Eylül University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2013

Research Areas

Computer Sciences, algorithms, Performance Modelling and Evaluation, Simulation and Modelling, Distributed Systems, Parallel Algorithms, Computer Vision, Computer Vision, bioinformatics, Database and Data Structures, Artificial Intelligence, Computer Learning and Pattern Recognition, Software, Operating Systems, Programming Languages, Software Engineering, Engineering and Technology

Academic Titles / Tasks

- I. Assistant Professor, Karadeniz Technical University, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri, 2018 - Continues
- II. Assistant Professor, Karadeniz Technical University, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri, 2013 - 2018
- III. Research Assistant PhD, Karadeniz Technical University, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri, 2012 - 2013
- IV. Research Assistant, Dokuz Eylül University, Faculty Of Engineering, Department Of Computer Engineering, 2003 - 2012
- V. Research Assistant, Karadeniz Technical University, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri, 2002 - 2003

Academic and Administrative Experience

- I. Deputy Head of Department, Karadeniz Technical University, Fen Fakültesi, İstatistik ve Bilgisayar Bilimleri, 2013 - 2023

Courses

- I. Mesleki İngilizce, Undergraduate, 2016 - 2017
- II. Görsel Programlama, Undergraduate, 2016 - 2017
- III. Bilgisayar Oyunları ve Simülasyon, Undergraduate, 2015 - 2016
- IV. Text-Based Information Retrieval, Postgraduate, 2015 - 2016
- V. Algoritma Tasarımı, Undergraduate, 2015 - 2016
- VI. Programlamaya Giriş, Undergraduate, 2015 - 2016
- VII. VERİTABANI YÖNETİM SİSTEMLERİ, Undergraduate, 2013 - 2014
- VIII. Text-based Information Retrieval, Doctorate, 2014 - 2015
- IX. NESNEYE YÖNELİK PROGRAMLAMA, Undergraduate, 2013 - 2014
- X. İŞLETİM SİSTEMLERİ, Undergraduate, 2013 - 2014

Advising Theses

- I. Berber T., LINEAR OPTIMIZATION APPROACHES FOR PUBLIC TRANSPORTATION SYSTEMS, Postgraduate, B.SİYAH(Student), 2023
- II. Berber T., TOPIC MODELING WITH LDA AND NMF IN ENGLISH NEWS TEXTS: THE CASE OF TURKEY AND GREECE, Postgraduate, S.YAY(Student), 2022
- III. Berber T., Evaluation of the performances of fuzzy cluster approaches in clustering burn wound images, Doctorate, Y.AKBAŞ(Student), 2020
- IV. Berber T., Comparison of ANFIS and ARIMA models via industry 4.0 data, Postgraduate, B.İPEK(Student), 2019
- V. Berber T., Authorship recognition with text mining methods: The example of Divan literature, Postgraduate, A.OSMAN(Student), 2018
- VI. Berber T., Facial expression recognition with machine learning in real-time video, Postgraduate, M.BEKİR(Student), 2018
- VII. Berber T., Computer-aided selection of correct statistical tests in data analysis, Postgraduate, M.SARİ(Student), 2017
- VIII. Berber T., Sentiment analysis in turkish social media texts, Postgraduate, H.AMANET(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Estimating Mediterranean stand fuel characteristics using handheld mobile laser scanning**

technology

COŞKUNER K. A., Vatandaslar C., ÖZTÜRK M., HARMAN İ., BİLGİLİ E., KARAHALİL U., BERBER T., TUNÇ GÖRMÜŞ E.
INTERNATIONAL JOURNAL OF WILDLAND FIRE, vol.32, no.9, pp.1347-1363, 2023 (SCI-Expanded)

II. Automatic classification of skin burn colour images using texture-based feature extraction

ŞEVİK U., KARAKULLUKÇU E., BERBER T., AKBAŞ Y., TÜRKYILMAZ S.

IET IMAGE PROCESSING, vol.13, no.11, pp.2018-2028, 2019 (SCI-Expanded)

III. Diurnal surface fuel moisture prediction model for Calabrian pine stands in Turkey

BİLGİLİ E., COŞKUNER K. A., Usta Y., SAĞLAM B., KÜÇÜK Ö., BERBER T., GOLTAS M.

IFOREST-BIOGEOSCIENCES AND FORESTRY, vol.12, pp.262-271, 2019 (SCI-Expanded)

IV. Identification of suitable fundus images using automated quality assessment methods

ŞEVİK U., KÖSE C., BERBER T., ERDÖL H.

JOURNAL OF BIOMEDICAL OPTICS, vol.19, no.4, 2014 (SCI-Expanded)

V. Breast mass contour segmentation algorithm in digital mammograms

Berber T., Alpkocak A., Balci P., Dicle O.

COMPUTER METHODS AND PROGRAMS IN BIOMEDICINE, vol.110, no.2, pp.150-159, 2013 (SCI-Expanded)

Articles Published in Other Journals

I. AN ALGORITHM FOR THE VERTICES ON THE PATHS OF MINIMAL LENGTH IN THE SUBORBITAL GRAPHS

Akbaba Ü., Değer A. H., Berber T.

Proceedings of the 6th International Conference on Computational Mathematics and Engineering Sciences (CMES-2022), vol.1, no.1, pp.250-255, 2022 (Conference Book)

II. Performance Evaluation of Distance Metrics on Fuzzy Clustering of Burn Images

Akbaş Y., Berber T.

Dokuz Eylül Üniversitesi Mühendislik Fakültesi Fen ve Mühendislik Dergisi, vol.22, no.65, pp.639-647, 2020 (Peer-Reviewed Journal)

Books & Book Chapters

I. Implementation of Digitalization in Food Industry

ŞEN K. Ö., DURAKBAŞA N., ERDÖL H., BERBER T., BAŞ G., ŞEVİK U.

in: DAAAM INTERNATIONAL SCIENTIFIC BOOK 2017, Branko KATALINIC, Editor, DAAAM International Vienna and DAAAM scriptorium GmbH, Viyana, pp.91-104, 2017

II. Expansion and Re-ranking Approaches for Multimodal Image Retrieval using Text-based Methods

BERBER T., Kilinc D., Alpkocak A.

in: ImageCLEF: Experimental Evaluation in Visual Information Retrieval, Müller H., Deselaers T., Clough P., Caputo B., Editor, Springer Heidelberg Dordrecht Routledge, London/New York, New York, pp.261-274, 2010

III. An Extended Vector Space Model for Content-Based Image Retrieval

BERBER T., Alpkocak A.

in: Multilingual Information Access Evaluation II, Peters C., Caputo B., Gonzalo J., Jones G.J.F., Kalpathy-cramer J., Müller H., Tsirikas T., Editor, Springer-Verlag, Berlin, pp.219-222, 2009

Refereed Congress / Symposium Publications in Proceedings

I. AN ALGORITHM FOR THE VERTICES ON THE PATHS OF MINIMAL LENGTH IN THE SUBORBITAL GRAPHS

Akbaba Ü., Değer A. H., Berber T.

THE SIXTH INTERNATIONAL CONFERENCE ON COMPUTATIONAL MATHEMATICS AND ENGINEERING SCIENCES (CMES-2022), Ordu, Turkey, 20 - 22 May 2022, pp.188

- II. **Development of a Real-Time Abrasion Monitoring and Forward Prediction System for Rubber Lifter Bars in Grinding Mills**
Altuncu A., Çalışkan B., Şevik U., Berber T., Erdöl H., Yazıcı E. Y., Celep O., Çakır O., Yazgan A., Çakır F.
IMPS-2022 17th International Mineral Processing Symposium, İstanbul, Turkey, 15 - 17 December 2022, vol.17, pp.123-130
- III. **Orman Yangınlarının Uzaktan Algılama Teknikleri ve Karar Destek Sistemleri ile Analizi: 2021 Yılı Büyük Marmaris-Armutalan Yangını Örneği**
Coşkuner K. A., Çil B., Bilgili E., Berber T.
IV. Ulusal Karadeniz Ormancılık Kongresi, Trabzon, Turkey, 06 December 2021 - 09 January 2022
- IV. **Linear Optimization Approaches for Public Transport Systems**
Siyah B., Akbaş S., Berber T.
XXI. International Symposium on Econometrics, Operational Research and Statistics, Çanakkale, Turkey, 8 - 10 September 2021, no.51372, pp.76-79
- V. **Evaluation of Short Term Results of Turkish Fire Weather Index System Software: A Case Study in Köyceğiz State Forest Enterprise**
COŞKUNER K. A., BERBER T., BİLGİLİ E.
9th International Symposium on Atmospheric Sciences, İstanbul, Turkey, 23 - 26 October 2019, pp.99-104
- VI. **Software Development and Structure of the Fire Danger Rating System in Turkey**
Coşkuner K. A., Berber T., Şevik U., Usta Y., Bilgili E.
8th International Conference on Forest Fire Research, Coimbra, Portugal, 12 - 16 November 2018, pp.193
- VII. **Yanık Görüntülerinin Kümelenmesinde Bulanık Kümeleme Yaklaşımının Başarımlarının Ölçülmesi**
AKBAŞ Y., BERBER T.
XIX. Ulusal ve II. Uluslararası Biyoistatistik Kongresi, Antalya, Turkey, 25 - 28 October 2017, pp.24
- VIII. **Development and structure of the Turkish National Fire Weather Index System's Software**
COŞKUNER K. A., BİLGİLİ E., BERBER T., ŞEVİK U., USTA Y.
International Symposium on New Horizons in Forestry (ISFOR 2017), Isparta, Turkey, 18 - 20 October 2017, pp.112
- IX. **Determining Unnecessary Test Orders in Biochemistry Laboratories: A Case Study for Thyroid Hormone Tests**
AKBAŞ Y., AKBAŞ S., BERBER T.
10th International Statistics Congress, Ankara, Turkey, 6 - 08 December 2017, pp.219
- X. **Performance Comparison of the Distance Metrics in Fuzzy Clustering of Burn Images**
AKBAŞ Y., BERBER T.
10th International Statistics Congress, Ankara, Turkey, 6 - 08 December 2017, pp.111
- XI. **Comparison of the Effect of Color Spaces in Fuzzy Clustering of Burn Images**
AKBAŞ Y., BERBER T.
International Conference on Computational and Statistical Methods in Applied Sciences, Samsun, Turkey, 9 - 11 November 2017, pp.192
- XII. **Association Analysis Method for Determining Unnecessary Test Orders and Effective Use of HbA1C Test**
AKBAŞ Y., AKBAŞ S., BERBER T.
International Conference on Computational and Statistical Methods in Applied Sciences, Samsun, Turkey, 9 - 11 November 2017, pp.244-245
- XIII. **Biyokimya Laboratuvarı Test İstemlerinin Etkin Kullanımının Birliktelik Analizi Yöntemi ile İncelenmesi**
AKBAŞ Y., AKBAŞ S., BERBER T., ÖREM A.
XVIII. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu 2017, Trabzon, Turkey, 5 - 07 October 2017, pp.420

- XIV. **An Implementation of Industrial Internet of Things Based Total Quality Management in the Food Industry**
ŞEN K. Ö., DURAKBAŞA N., ERDÖL H., BERBER T., ŞEVİK U.
International Symposium for Production Research 2017, Viyana, Austria, 13 - 15 September 2017, pp.66
- XV. **Yerli İstatistiksel Veri Analiz Platformu**
BERBER T., SARİ M.
Xth International Statistics Days Conference, Giresun, Turkey, 7 - 09 October 2016, pp.1
- XVI. **Anket Çalışmalarında Diğer Seçeneğinde Bulunan Açıklamaların Gözetimli Sınıflandırma Yöntemleri İle İlgili Seçeneğe Aktarılması**
BİLGİN A. O., BERBER T.
X. International Statistics Days Conference, Giresun, Turkey, 7 - 09 October 2016, pp.648-654
- XVII. **Computer Based Extraction of Phenotypic Features of Human Congenital Anomalies from the Digital Literature with Natural Language Processing Techniques**
Karakulah G., DİCLE O., Kosaner O., SUNER KARAKÜLAH A., Birant C. C., BERBER T., Canbek S.
25th European Medical Informatics Conference (MIE), İstanbul, Turkey, 31 August - 03 September 2014, vol.205, pp.570-574
- XVIII. **ÇAĞRIŞIM: Türkçeyi ve Bireyi Geliştirici Eğitim Oyunu**
BERBER T., Suncak A., BİRANT Ç. C., Aktaş Ö.
XVIII. Türkiye'de İnternet Konferansı, İstanbul, Turkey, 9 - 11 December 2013, pp.1-4
- XIX. **Retina Görüntülerinin İstatistiksel Olarak Kalite Değerlendirmesi**
ŞEVİK U., BERBER T., ERDÖL H.
8. Uluslararası İstatistik Kongresi, Antalya, Turkey, 27 - 30 October 2013, pp.278-279
- XX. **Göğüs Kitlelerinin Yoğunluklarının Mamografi Görüntülerinden İstatistiksel Olarak Elde Edilmesi**
BERBER T., ŞEVİK U., Alpkoçak A., Balci P.
8. Uluslararası İstatistik Kongresi, Antalya, Turkey, 27 - 30 October 2013, pp.105-106
- XXI. **DEMIR at ImageCLEFMed 2011: Evaluation of Fusion Techniques for Multimodal Content-Based Medical Image Retrieval**
Alpkoçak A., Öztürkmenoğlu O., BERBER T., Vahid A. H., Hamed R. G.
ImageCLEF 2011, Amsterdam, Netherlands, 19 - 22 September 2011, pp.1-10
- XXII. **DEMIR at ImageCLEFwiki 2011:Evaluating Different Weighting Schemes in Information Retrieval**
BERBER T., Vahid A. H., Öztürkmenoğlu O., Hamed R. G., Alpkoçak A.
ImageCLEF 2011, Amsterdam, Netherlands, 19 - 22 September 2011, pp.1-7
- XXIII. **İçerik Tabanlı Tıbbi Görüntü Erişimi için Bütünleştirilmiş Bilgi Erişimi Modeli**
BERBER T., Alpkoçak A.
VI. Ulusal Tıp Bilişimi Kongresi, Antalya, Turkey, 12 - 15 November 2009, pp.344-351
- XXIV. **DEU at ImageCLEFmed 2009: Evaluating Re-Ranking and Integrated Retrieval Model**
BERBER T., Alpkoçak A.
ImageCLEF 2009, Corfu, Greece, 30 September - 02 October 2009, pp.1-8
- XXV. **Mamografi Raporları için Mnatıksal Bilgi Erişim Sistemi**
BERBER T., Alpkoçak A.
14. Ulusal Biyomedikal Mühendisliği Toplantısı, İzmir, Turkey, 20 - 22 May 2009, pp.1-6
- XXVI. **MPEG-7 based service guide for mobile TV**
Gençpınar E., BERBER T., Seçkin G., Alpkoçak A.
3rd International Conference on Mobile Multimedia Communications, Nafpaktos, Greece, 27 - 29 August 2007, pp.11-16

Supported Projects

- I. ŞEVİK U., BERBER T., ERDÖL H., ERDÖL E. S., BAŞER O., TUBİTAK Project, Giyilebilir Teknolojiler Yardımıyla

Çalışanların Performanslarının Belirlenmesi ve İş Güvenliğinin Sağlanması, Continues

- II. BERBER T., ŞEVİK U., COŞAR A. M., SARİ M., AMANET H., SEÇKİN K., TUBITAK Project, Sosyal Medya ve Doküman Analiz Sistemi, Continues
- III. Gümüş S., Berber T., TUBITAK Project, Orman Yollarının Fonksiyonel Duruma Bağlı Etkinlik Skorunun Belirlenmesi, 2022 - 2024
- IV. Coşkuner K. A., Bilgili E., Berber T., Karahalil U., Tunç Görmüş E., Vatandaşlar C., Baltacı U., TUBITAK Project, Forest Fuel Mapping and Fire Risk-Danger Potential Assessment System (ORYAM-SIS), 2022 - 2024
- V. Şevik U., Berber T., TÜBİTAK - AB COST Project, CA18209 - European network for Web-centred linguistic data science, 2019 - 2023
- VI. DEĞER A. H., AKBABA Ü., BERBER T., Project Supported by Higher Education Institutions, Sürekli Kesirlerin Yinelenme Bağlantıları ile Alt Yörüngesel Graflardaki Ağaçların Özel Köşeleri, 2018 - 2022
- VII. ŞEVİK U., BERBER T., TÜRKİYILMAZ S., YILMAZ E., KARAKULLUKÇU E., YEGİNOĞLU Y., Project Supported by Higher Education Institutions, Yanık Hastalarının 3-Boyutlu Modellenmesi, 2016 - 2020
- VIII. BERBER T., ŞEVİK U., AKBAŞ S., YEGİNOĞLU Y., ÖREM A., TAT M., Project Supported by Higher Education Institutions, Veri Madenciliği Yöntemleri Aracılığı ile Laboratuvar Testlerinin İstem-Gereklik İlişkisinin Belirlenmesi, 2016 - 2018
- IX. BERBER T., Industrial Thesis Project, YERLİ İSTATİSTİKSEL VERİ ANALİZ PLATFORMU, 2015 - 2016
- X. KÖSE C., BERBER T., ŞEVİK U., YILMAZ E., TUBITAK Project, Şehir İçi ve Şehirlerarası Trafik Şebekelerinin Bilgisayar Ortamında Modellenmesi, Simülasyonu ve Analizini Gerçekleştirecek Yerli Bir Yazılımın Üretilmesi, 2014 - 2015
- XI. BERBER T., TUBITAK Project, Çağrışım, Türkçe'yi Ve Bireyi Geliştirici Eğitim Oyunu, 2013 - 2015
- XII. TUBITAK Project, Sayısal Mamografi Görüntüleri İçin İçerik Tabanlı Tıbbi Görüntü Erişim Sistemi, 2008 - 2011

Patent

- I. Sosyal Medya ve Doküman Analiz Sistemi (TURKCELL Ortaklığında), Patent, CHAPTER B Implementation of Operations; Transport, The Invention Recourse Number: 2019/21903 , Standard Registration, 2019
- II. Personel takip ve iş verimliliği analiz sistemi (MEKAP Ortaklığında), Patent, CHAPTER B Implementation of Operations; Transport, The Invention Recourse Number: 2018/19243 , Standard Registration, 2018
- III. Synthetic Population Synthesis Method, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Registration Number: TR 2015 07903 B , Standard Registration, 2017
- IV. Mechanism to Automatically Obtain Road Facilities and Connections from a Map Provider, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Registration Number: TR 2015 07427 B , Standard Registration, 2017

Activities in Scientific Journals

- I. TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES, Assistant Editor/Section Editor, 2017 - Continues

Scientific Refereeing

- I. TUBITAK Project, March 2015
- II. TUBITAK Project, March 2015
- III. TUBITAK Project, March 2015
- IV. TUBITAK Project, February 2015
- V. Academic Radiology, Other Indexed Journal, July 2013
- VI. Biomedical Signal Processing and Control, SCI Journal, July 2013

Metrics

Publication: 36
Citation (WoS): 158
Citation (Scopus): 213
H-Index (WoS): 5
H-Index (Scopus): 5

Congress and Symposium Activities

- I. ImageCLEF 2011, Attendee, Amsterdam, Netherlands, 2011
- II. ImageCLEF 2009, Attendee, Corfu, Greece, 2009

Coaching Duties

Refereeing Duties

Non Academic Experience

- I. Özel Somel Bilgisayar Kursu
- II. Business Establishment Private, Özel Trabzon Somel Bilgisayar Kursu