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International Researcher IDs

ORCID: 0000-0002-6487-5581

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

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Education Information

I. Doctorate, Dokuz Eylul University, Faculty Of Engıneerıng, Department Of Computer Engıneerıng, Turkey 2007 - 2013
II. Postgraduate, Dokuz Eylul University, Faculty Of Engıneerıng, Department Of Computer Engıneerıng, Turkey 2003 - 2007
III. Undergraduate, Karadeniz Technical University, Fen Fakültesi, 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 Eylul 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, Bilgisayar Bilimleri, 2018 - Continues
II. Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2013 - 2018
III. Research Assistant PhD, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2012 - 2013
IV. Research Assistant, Dokuz Eylul University, Faculty Of Engıneerıng, Department Of Computer Engıneerıng, 2003 - 2012
V. Research Assistant, Karadeniz Technical University, Fen Fakültesi, Bilgisayar Bilimleri, 2002 - 2003

Academic and Administrative Experience

I. Deputy Head of Department, Karadeniz Technical University, Fen Fakültesi, 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. **Artificial Circulation System Algorithm: A Novel Bio-Inspired Algorithm**
Ozcan N., UTKU S., BERBER T.
CMES-COMPUTER MODELING IN ENGINEERING & SCIENCES, 2024 (SCI-Expanded)

II. **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)

III. **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)

IV. **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)

V. **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)

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

Refereed Congress / Symposium Publications in Proceedings

I. **Preliminary Results of Canopy Fuel Load Estimation Using Mobile Laser Scanning in Turkish Red**

Pine Stands
Coşkuner K. A., Vatandaşlar C., Öztürk M., Harman İ., Karahalil U., Berber T., Tunç Görmüş E., Bilgili E.
3rd International Conference on Environmental Protection and Disaster Risks (ENVIRORISKs2024), Sofija,
Bulgaria, 4 - 06 June 2024, vol.883, pp.374-380

II. **Integration of Non-Negative Matrix Factorization to Identification of Immune System Checkpoints**
Siyah B., Kalaycı M. E., Özdemir S., Berber T., Turhan K.
15. Tıp Bilişimi Kongresi, Trabzon, Turkey, 30 - 31 May 2024, pp.158-170

III. **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

IV. **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

V. **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

VI. **VERİ ANALİZİ YÖNTEMİ İLE YUNUS EMRE YAYINLARINA BİR YAKLAŞIM**
Coşar A. M., Berber T.
Vefatının 700. Yılında Bizim Yunus Sempozyumu Vefatının 700. Yılında Bizim Yunus Sempozyumu (26-28 Mayıs
2021), Aksaray, Turkey, 26 - 28 May 2021, vol.1, pp.117-133

VII. **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

VIII. **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

IX. **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 Conferance on Forest Fire Research, Coimbra, Portugal, 12 - 16 November 2018, pp.193

X. **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

XI. **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

XII. **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

XIII. **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

XIV. **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

XV. **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

XVI. **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

XVII. **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

XVIII. **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

XIX. **Yerli İstatistiksel Veri Analiz Platformu**

BERBER T., SARİ M.

Xth International Statistics Days Conference, Giresun, Turkey, 7 - 09 October 2016, pp.1

XX. **Computer Based Extraction of Phenoptypic 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

XXI. **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

XXII. **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

XXIII. **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

XXIV. **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

XXV. **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

XXVI. **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

XXVII. **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

XXVIII. **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

XXIX. **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. BERBER T., KARAYAĞIZ E., Project Supported by Higher Education Institutions, Negatif Olmayan Matris Ayrışımı Temelli Scientometric Analiz Uygulaması Geliştirilmesi, 2024 - 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. ŞEVİK U., BERBER T., ERDÖL H., ERDÖL E. S., BAŞER O., TUBITAK Project, Giyilebilir Teknolojiler Yardımıyla Çalışanların Performanslarının Belirlenmesi ve İş Güvenliğinin Sağlanması, Continues

IV. Şevik U., Berber T., Erbay Dalkılıç T., TUBITAK Project, HEPSİS: HAVA YOLLARI EKİP PLANLAMA SİSTEMİ (THY TEKNOLOJİ), 2024 - 2026

V. Şevik U., Berber T., TUBITAK Project, DEKORATİF VE TEKNOLOJİK CLT (ÇAPRAZ LAMİNE AHŞAP) GELİŞTİRİLMESİ, 2024 - 2026

VI. Şevik U., Berber T., TUBITAK Project, Transportation Plan Optimization and Decision Support System in Public Transportation, 2023 - 2025

VII. Şevik U., Berber T., MUTLU O., TUBITAK Project, Implementation Of A Wireless Sensor Network System For Wear Measurement And Estimation Of Rubber Lifterbars In Ore Grinding Mills, 2023 - 2025

VIII. Gümüş S., Berber T., TUBITAK Project, Orman Yollarının Fonksiyonel Duruma Bağlı Etkinlik Skorunun Belirlenmesi, 2022 - 2024

IX. 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

X. Şevik U., Berber T., TÜBİTAK - AB COST Project, CA18209 - European network for Web-centred linguistic data science, 2019 - 2023

XI. DEĞER A. H., AKBABA Ü., BERBER T., Project Supported by Higher Education Institutions, Sürekli Kesirlerin Yinelenme Bağıntıları ile Alt Yörüngesel Graflardaki Ağaçların Özel Köşeleri, 2018 - 2022

XII. Şevik U., Çakır O., Berber T., TUBITAK Project, Real-time Monitoring and Prediction of Wear and Operating Parameters of Rubber Lining Products Used in Ore Grinding Mills (FKK-RETİNA-İNOVAS), 2019 - 2021

XIII. Şevik U., Berber T., Coşar A. M., TUBITAK Project, Social Media and Document Analysis System (TURKCELL), 2019 - 2021

XIV. ŞEVİK U., BERBER T., TÜRKYILMAZ S., YILMAZ E., KARAKULLUKÇU E., YEGİNOĞLU Y., Project Supported by Higher Education Institutions, Yanık Hastalarının 3-Boyutlu Modellenmesi, 2016 - 2020

XV. 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-Gereklilik İlişkisinin Belirlenmesi, 2016 - 2018

XVI. BERBER T., Industrial Thesis Project, YERLİ İSTATİSTİKSEL VERİ ANALİZ PLATFORMU, 2015 - 2016

XVII. BERBER T., ŞEVİK U., KÖSE C., YILMAZ E., TUBITAK Project, Şehir İçi ve Şehirlerarası Trafik Şebekelerinin Bilgisayar Ortamında Modellenmesi, Simülasyonu ve Analizini Gerçekleştirecek Yerli Bir Yazılımın Üretilmesi, 2014 - 2015

XVIII. BERBER T., TUBITAK Project, Çağrışım, Türkçe'yi Ve Bireyi Geliştirici Eğitim Oyunu, 2013 - 2015

XIX. TUBITAK Project, Sayısal Mamografi Görüntüleri İçin İçerik Tabanlı Tıbbi Görüntü Erişim Sistemi, 2008 - 2011

Patent

I. Şevik U., Berber T., Coşar A. M., 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. Şevik U., Berber T., Erdöl H., Yavuz R., 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. Yılmaz E., Şevik U., Berber T., Synthetic Population Synthesis Method, Patent, CHAPTER B Implementation of Operations; Transport, The Invention Registration Number: TR 2015 07903 B , Standard Registration, 2017

IV. Yılmaz E., Berber T., Şevik U., 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
VII. Academic Radiology, Other Indexed Journal, November 2012

Metrics

Publication: 40
Citation (WoS): 171
Citation (Scopus): 226
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