

Assoc. Prof. Yücel Çımtay

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAP-6727-2021

Yoksis Researcher ID: 276743

Education Information

Post Doctorate, Loughborough University, Digital technologies, Digital technologies, England 2018 - 2020

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, Turkey 2013 - 2018

Postgraduate, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, Elektrik Elektronik Mühendisliği, Turkey 2010 - 2012

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 2002 - 2008

Dissertations

Doctorate, Hiperspektral veride doğrusal olmayan karışma durumu için bolluk haritalarının elde edilmesi, Ankara University, Fen Bilimleri Enstitüsü, Electrical and Electronics Engineering, 2018

Postgraduate, Doğrusal olmayan hareket kestirimi ile video çerçeve ara değerlemesi, Eskisehir Osmangazi University, Fen Bilimleri Enstitüsü, 2012

Research Areas

Signal Processing, Computer Vision, Artificial Intelligence, Computer Learning and Pattern Recognition, Biosignal Processing

Academic Titles / Tasks

Assistant Professor, TED University, Faculty of Engineering, Department of Computer Engineering, 2021 - Continues
2021 - Continues

Courses

Speech Processing, Postgraduate

Speech Processing, Undergraduate

Fundamentals of Programming I, Undergraduate, 2021 - 2022

Senior Project I, Undergraduate, 2022 - 2023, 2021 - 2022
Microprocessors, Undergraduate, 2022 - 2023, 2021 - 2022
Fundamentals of Programming I, Undergraduate, 2021 - 2022
Signals and Systems for Computer Engineers, Postgraduate, 2022 - 2023
Fundamentals of Programming II, Undergraduate, 2021 - 2022
Database Systems, Undergraduate, 2021 - 2022
Summer Practice I, Undergraduate, 2022 - 2023
Signals and Systems for Computer Engine, Undergraduate, 2022 - 2023
Fundamentals of Programming II, Undergraduate, 2021 - 2022
Relational Databases, Undergraduate, 2021 - 2022
Summer Practice II, Undergraduate, 2022 - 2023

Jury Memberships

Post Graduate, Post Graduate, TED Üniversitesi, December, 2022
Competition, Türkiye Bilişim Derneği-Genç Beyinler Yeni Fikirler, TED Üniversitesi, May, 2022

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Estimating Plant Nitrogen by Developing an Accurate Correlation between VNIR-Only Vegetation Indexes and the Normalized Difference Nitrogen Index**
Çimtay Y.
Remote Sensing, vol.15, no.15, 2023 (SCI-Expanded)
- II. **Smart and real-time image dehazing on mobile devices**
Cimtay Y.
JOURNAL OF REAL-TIME IMAGE PROCESSING, vol.18, no.6, pp.2063-2072, 2021 (SCI-Expanded)
- III. **A New Vegetation Index in Short-Wave Infrared Region of Electromagnetic Spectrum**
Çimtay Y., Ozbay B., Nur Yılmaz G., Bozdemir E.
IEEE ACCESS, vol.9, pp.148535-148545, 2021 (SCI-Expanded)
- IV. **Cross-Subject Multimodal Emotion Recognition Based on Hybrid Fusion**
Cimtay Y., Ekmekcioglu E., Caglar-Ozhan S.
IEEE ACCESS, vol.8, pp.168865-168878, 2020 (SCI-Expanded)
- V. **A novel bilinear unmixing approach for reconsideration of subpixel classification of land cover**
Cimtay Y., İlk H. G.
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.152, pp.126-140, 2018 (SCI-Expanded)

Articles Published in Other Journals

- I. **Estimation of Air Light With Deep Learning for a Near Real-Time Image Dehazing System**
ÇİMTAY Y.
Black Sea Journal of Engineering and Science, vol.6, no.4, pp.604-612, 2023 (Peer-Reviewed Journal)
- II. **Edge Detection for 3 Dimensional Video Quality Assessment**
NUR YILMAZ G., ÇİMTAY Y.
Journal of Artificial Intelligence and Data Science, vol.3, no.1, pp.50-53, 2023 (Peer-Reviewed Journal)
- III. **Depth Perception Assessment of a 3D Video Based on Spatial Resolution**
NUR YILMAZ G., ÇİMTAY Y.
Journal of Artificial Intelligence and Data Science, vol.2, no.1, pp.1-7, 2022 (Peer-Reviewed Journal)
- IV. **Gender Classification from Eye Images by Using Pretrained Convolutional Neural Networks**

Çimtay Y., Nur Yılmaz G.

The Eurasia Proceedings of Science, Technology, Engineering & Mathematics (EPSTEM), 2021

- V. **Fingerprint Pattern Classification by Using Various Pre-Trained Deep Neural Networks**
ÇİMTAY Y., Alkan B., Demirel B.
Avrupa Bilim ve Teknoloji Dergisi, vol.2021, no.24, pp.258-261, 2021 (Peer-Reviewed Journal)
- VI. **Towards Real Time Image Dehazing on Android Operating System**
ÇİMTAY Y.
Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.62, no.2, pp.177-178, 2020 (Peer-Reviewed Journal)
- VII. **Investigating the Use of Pretrained Convolutional Neural Network on Cross-Subject and Cross-Dataset EEG Emotion Recognition**
Cimtay Y., Ekmekcioglu E.
SENSORS, vol.20, no.7, 2020 (Scopus)
- VIII. **A NOVEL DERIVATIVE-BASED CLASSIFICATION METHOD FOR HYPERSPECTRAL DATA PROCESSING**
Cimtay Y., İlk H. G.
ADVANCES IN ELECTRICAL AND ELECTRONIC ENGINEERING, vol.15, no.4, pp.657-662, 2017 (Scopus)

Books & Book Chapters

- I. **3D Video QoE Based Adaptation Framework for Future Communication Networks**
NUR YILMAZ G., ÇİMTAY Y.
in: IoT Based Control Networks and Intelligent Systems, P. P. Joby, Valentina E. Balas, Ram Palanisamy, Editor, Springer Nature Singapore Pte Ltd., pp.757-768, 2022
- II. **Low Light Image Enhancement on Mobile Devices by Using Dehazing**
ÇİMTAY Y., NUR YILMAZ G.
in: Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering, Muhammet Nuri Seyman, Editor, Springer, pp.57-67, 2022
- III. **Current Studies in Basic Sciences, Engineering and Technology 2021**
Çimtay Y.
Published by ISRES Publishing, International Society for Research in Education and Science (ISRES), 2021
- IV. **Technology**
NUR YILMAZ G., ÇİMTAY Y.
in: Current Studies in Basic Sciences, Engineering and Technology 2021, Dr. Mehmet Ozaslan, Dr. Yasmeen Junejo, Editor, The International Society for Research in Education and Science (ISRES), Konya, pp.86-93, 2021

Refereed Congress / Symposium Publications in Proceedings

- I. **A NEW HYPERSPECTRAL MULTI-LEVEL SYNTHETIC HAZY IMAGE DATASET FOR BENCHMARK OF DEHAZING METHODS**
Yazıcı B., Çimtay Y., Çetinkaya B.
workshop of hyperspectral image and signal processing (IEEE Whispers), Athens, Greece, 31 October - 02 November 2023, pp.1-10
- II. **3D Video QoE Based Adaptation Framework for Future Communication Networks**
Yılmaz G. N., Çimtay Y.
3rd International Conference on IoT Based Control Networks and Intelligent Systems, ICICNIS 2022, Kottayam, India, 1 - 02 July 2022, vol.528, pp.757-768
- III. **A New Multi-level Hazy Image and Video Dataset for Benchmark of Dehazing Methods**
Çetinkaya B., Çimtay Y., Günay F. N., Yılmaz G. N.
4th International Conference on Image Processing and Capsule Networks, ICIPCN 2023, Bangkok, Thailand, 10 - 11

August 2023, vol.798 LNNS, pp.269-280

- IV. **An Error Dependent Enhancement Method for Images Captured in Dense Fog**
Çimtay Y., Nur Yılmaz G.
3rd International Conference on IoT Based Control Networks and Intelligent Systems, ICICNIS 2022, Kottayam, India, 1 - 02 July 2022, vol.528, pp.743-756
- V. **A NOVEL TRAFFIC VIDEO DATASET FOR VEHICLE TRACKING**
TAN Y., ULU E. N., ÇİMTAY Y., NUR YILMAZ G.
International Conference on Engineering Technologies (ICENTE 22), Konya, Turkey, 17 - 19 November 2022
- VI. **Assessment of a New Adaptation Approach for Scalable 3D Video**
NUR YILMAZ G., ÇİMTAY Y., ÖZTOPRAK K.
IEEE Signal Processing and Communications Applications (SIU) 2022, Safranbolu, Turkey, 15 - 18 May 2022
- VII. **Low Light Image Enhancement on Mobile Devices by Using Dehazing**
Çimtay Y., Nur Yılmaz G.
1st International Congress of Electrical and Computer Engineering, ICECENG 2022, Bandirma, Turkey, 9 - 12 February 2022, vol.436 LNICST, pp.57-67
- VIII. **Assessment of a New Adaptation Approach for Scalable 3D Video Ölçeklenebilir 3B Video İçin Yeni Bir Adaptasyon Yaklaşımının Değerlendirilmesi**
Yılmaz G., Çimtay Y., Oztoprak K.
30th Signal Processing and Communications Applications Conference, SIU 2022, Safranbolu, Turkey, 15 - 18 May 2022
- IX. **3D VIDEO QUALITY ASSESSMENT BASED ON PSNR IMPROVE**
NUR YILMAZ G., ÇİMTAY Y.
VI. ULUSLARARASI BİLİMSEL VE MESLEKİ ÇALIŞMALAR KONGRESİ, Turkey, 23 - 25 December 2021
- X. **3D Video Quality Assessment Based on PSNR Improvement**
Nur Yılmaz G., Çimtay Y.
Scientific and Vocational Studies Congress, pp.15
- XI. **DEHAZING BASED LOW LIGHT IMAGE ENHANCEMENT ON ANDROID OPERATING SYSTEM**
Çimtay Y., Yılmaz G. N.
23 - 26 December 2021, pp.17
- XII. **INVESTIGATING THE USE OF PRETRAINED CNNs FOR THE PROBLEM OF GENDER CLASSIFICATION FROM EYE IMAGES**
ÇİMTAY Y., NUR YILMAZ G.
ICONTECH (International Conference on Technology), Antalya, Turkey, 4 - 07 November 2021
- XIII. **Fingerprint Pattern Recognition by Using Pre-Trained Convolutional Neural Network**
ÇİMTAY Y., Demirel B., Alkan B.
International Conference On Access To Recent Advances In Engineering And Digitalization, Kayseri, Turkey, 7 - 09 March 2021
- XIV. **Music Makam Recognition by Using Convolutional Neural Network**
ÇİMTAY Y.
1st International Conference on Computing and Machine Intelligence (ICMI-2021), İstanbul, Turkey, 19 - 21 February 2021
- XV. **Capture Date Estimation of Historical Images by Using Deep Learning**
ÇİMTAY Y., İLK H. G.
ICENTE20, Konya, Turkey, 11 - 13 December 2020
- XVI. **A New Derivative-based Approach for Hyperspectral Classification**
Cimtay Y., Esin Y. E., İlk H. G., Giris I.
2017 25TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS CONFERENCE (SIU)
- XVII. **The Effect of Bant Selection to Success of Artificial Neural Network in Hyperspectral Classification**
Karakaya I., Cimtay Y.
2017 25TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS CONFERENCE (SIU)
- XVIII. **Calculation of Vegetation Index for Short Wave Infrared Hyperspectral Images**

Ozbay B., Cimtay Y., Kandaz F.

2017 25TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS CONFERENCE (SIU)

XIX. Temporal video interpolation with nonlinear motion estimation

ÇİMTAY Y., SEKE E.

IEEE SİNYAL İŞLEME ve İLETİŞİM UYGULAMALARI KURULTAYI, Muğla, Turkey, 18 - 20 April 2012

XX. Frame Rate Up-Conversion With Nonlinear Temporal Interpolation

Cimtay Y., Seke E.

2012 5TH INTERNATIONAL CONGRESS ON IMAGE AND SIGNAL PROCESSING (CISP), pp.206-210

XXI. UYARLAMALI İKİ YÖNLÜ HAREKET KESTİRİMLİ ZAMANSAL VİDEO ARA DEĞERLEMESİ

ÇİMTAY Y., SEKE E.

Elektrik-Elektronik ve Bilgisayar Sempozyumu 2011, Elazığ, Turkey, 12 - 14 September 2011

Activities in Scientific Journals

SENSORS, 2021 - Continues

Scientific Research / Working Group Memberships

TEDU IRF, 2021 - Continues