

## Personal Information

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## Education Information

Doctorate, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Bilgisayar Mühendisliği, Turkey  
2012 - 2017

## Foreign Languages

English, B2 Upper Intermediate

## Dissertations

Doctorate, A system implementation for analyzing and tracking motile objects in biomedical images, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Bilgisayar Mühendisliği, 2018

## Research Areas

Biomedical Engineering, Biomedical Image Processing, Biomedical Image Processing, Biosignal Processing, Biosignal Processing, Engineering and Technology

## Academic Titles / Tasks

Research Assistant, Yıldız Teknik Üniversitesi, Elektrik Elektronik Fakültesi, Bilgisayar Mühendisliği, 2012 - Continues  
Research Assistant, Orta Doğu Teknik Üniversitesi, Eğitim Fakültesi, Bilgisayar Ve Öğretim Teknolojileri Eğitimi, 2011 -  
2012

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **A fully automated hybrid human sperm detection and classification system based on mobile-net and the performance comparison with conventional methods**  
İlhan H. O. , Sigirci I., Serbes G., Aydın N.  
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.58, pp.1047-1068, 2020 (Journal Indexed in SCI)
- **Automatic directional masking technique for better sperm morphology segmentation and classification analysis**  
İlhan H. O. , Serbes G., Aydın N.  
ELECTRONICS LETTERS, vol.55, pp.256-257, 2019 (Journal Indexed in SCI)
- **The implementation of optimization methods for contrast enhancement**  
Elbir A., İlhan H. O. , Aydın N.  
COMPUTER SYSTEMS SCIENCE AND ENGINEERING, vol.34, pp.101-107, 2019 (Journal Indexed in SCI)
- **Smartphone based sperm counting - an alternative way to the visual assessment technique in sperm concentration analysis**  
İLHAN H. O. , AYDIN N.  
Multimedia Tools and Applications, 2019 (Journal Indexed in SCI)

- **A novel data acquisition and analyzing approach to spermiogram tests**  
İLHAN H. O. , AYDIN N.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.41, pp.129-139, 2018 (Journal Indexed in SCI)
- **Automatic Detection of Regions of Interest in Makler Images by Combinational Approach and Sperms Analysis by Fuzzy C-means**  
İLHAN H. O. , Karabiber F.  
CURRENT MEDICAL IMAGING REVIEWS, vol.14, pp.981-994, 2018 (Journal Indexed in SCI)

## Articles Published in Other Journals

- **Churn Analizinde Sınıflama ve Kümeleme Tekniklerinin Uygulanması**  
ELBİR A., İLHAN H. O.  
Akıllı Sistemler ve Uygulamaları Dergisi, vol.1, pp.239-242, 2018 (Other Refereed National Journals)
- **Sleep stage classification via ensemble and conventional machine learning methods using single channel EEG signals**  
İlhan H. O. , Bilgin G.  
International Journal of Intelligent Systems and Applications in Engineering, vol.5, pp.174-184, 2017 (Refereed Journals of Other Institutions)
- **Computer Based Grid Detection on Makler Images**  
İLHAN H. O. , KARABİBER F.  
International Journal of Signal Processing Systems, no.4, pp.323-327, 2016 (Refereed Journals of Other Institutions)
- **Active Learning as a Way of Increasing Accuracy**  
İLHAN H. O. , AMASYALI M. F.  
International Journal of Computer Theory and Engineering, vol.6, no.1, pp.460-465, 2014 (Refereed Journals of Other Institutions)
- **Comparing Informative Sample Selection Strategies in Classification Ensembles**  
İLHAN H. O. , AMASYALI M. F.  
International Journal of Machine Learning and Computing, vol.4, pp.79-84, 2014 (Refereed Journals of Other Institutions)
- **Pre-Mapping System with Single Laser Sensor Based on Gmapping algorithm**  
İlhan H. O. , Yavuz S.  
International Journal of Electrical Energy, vol.1, pp.97-101, 2013 (Refereed Journals of Other Institutions)

## Refereed Congress / Symposium Publications in Proceedings

- **A NOVEL EMBEDDED SYSTEM DESIGN TO ENHANCE THE STUDENT PRODUCTIVITY IN THE CLASSROOM**  
İLHAN H. O.  
International Science and Technology Conference (ISTEC), Prag, Czech Republic, 3 - 05 Temmuz 2019
- **The Effect of Nonlinear Wavelet Transform Based De-noising in Sperm Abnormality Classification**  
İLHAN H. O. , SİĞİRCİ İ. O. , SERBES G., AYDIN N.  
3rd International Conference on Computer Sciences and Engineering, Saray Bosna, Bosnia And Herzegovina, 20 Eylül 2018, pp.1-5
- **The Effects of the Modified Overlapping Group Shrinkage Technique on the Sperm Segmentation in the Stained Images**  
İLHAN H. O. , SERBES G., AYDIN N.  
41th International Conference on Telecommunications and Signal Processing (TSP), Atina, Greece, 04 Temmuz 2018, pp.1
- **Dual Tree Complex Wavelet Transform Based Sperm Abnormality Classification**  
İLHAN H. O. , SERBES G., AYDIN N.  
41th International Conference on Telecommunications and Signal Processing (TSP), Atina, Greece, 04 Temmuz

2018, pp.1

- **Short Time Fourier Transform Based Music Genre Classification**

ELBİR A., İLHAN H. O. , SERBES G., AYDIN N.

Electric Electronics, Computer Science, Biomedical Engineerings' Meeting (EBBT), İstanbul, Turkey, 18 Nisan 2018, pp.1

- **The Performance Evaluation of the Cat and Particle Swarm Optimization Techniques in the Image Enhancement**

ELBİR A., İLHAN H. O. , AYDIN N.

Electric Electronics, Computer Science, Biomedical Engineerings' Meeting (EBBT), İstanbul, Turkey, 18 Nisan 2018, pp.1

- **Computer aided motile sperm counting Bilgisayar Destekli Hareketli Sperm Sayımı**

İLHAN H. O. , AYDIN N.

2017 Medical Technologies National Conference, TIPTEKNO 2017, Trabzon, Turkey, 12 - 14 Ekim 2017, pp.1-5

- **Sleep stage classification by ensemble learning methods with active sample selection techniques**

İLHAN H. O. , Avcı C.

2017 International Artificial Intelligence and Data Processing Symposium, IDAP 2017, Malatya, Turkey, 16 - 17 Eylül 2017

- **Churn Analizinde Sınıflama ve Kümeleme Tekniklerinin Uygulanması**

ELBİR A., İLHAN H. O.

Akıllı Sistemlerde Yenilikler ve Uygulamaları Konferansı, Antalya, Turkey, 05 Ekim 2017 , pp.1-5

- **The Contribution of DSP Integration to ARM Cores in SBCs for the Video Decoding Process**

İLHAN H. O. , AYDIN N.

International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), India, 21 - 22 Eylül 2017

- **The mesothelioma disease diagnosis with artificial intelligence methods**

İLHAN H. O. , Celik E.

10th IEEE International Conference on Application of Information and Communication Technologies, AICT 2016, Baku, Azerbaijan, 12 - 14 Ekim 2016

- **Detection and estimation of down syndrome genes by machine learning techniques Down Sendromlu Genlerin Makine Öğrenmesi Teknikleri ile Tespiti ve Tahmini**

Celik E., İLHAN H. O. , ELBİR A.

25th Signal Processing and Communications Applications Conference, SIU 2017, Antalya, Turkey, 15 - 18 Mayıs 2017

- **The Effect of Active Sample Selection Technique on the Determination of Sleep Stages**

İLHAN H. O.

4th MacroTrendConference:Paris 2016, 20 - 22 Aralık 2016

- **The evaluation of detectors and descriptors on determination of semen cell**

İLHAN H. O. , ELBİR A.

2016 International Symposium on INnovations in Intelligent SysTems and Applications, INISTA 2016, Sinaia, Romania, 2 - 05 Ağustos 2016

- **Comparing Informative Sample Selection Strategies in Classification Ensembles**

İLHAN H. O. , AMASYALI M. F.

The 2nd International Conference on Information and Intelligent Computing, ICIC 2013, Kuala Lumpur, Malaysia, 29 Aralık 2013, vol.1, pp.1-4

- **Designing a system allowing high-definition video transfer with minimum latency and multi-use access to projection device by wireless**

Uhan H. O. , Akbas A.

1st International Conference on Complex Systems, ICCS 2012, Aghadir, Morocco, 5 - 06 Kasım 2012

- **A Comparative Study of Different IHS Transformation Models with a Tradeoff Parameter**

Kösesoy İ., Delibaşoğlu İ., İlhan H. O. , Çetin Ö.

Seoul International Conference on Applied Science and Engineering, Seoul, South Korea, 6 - 10 Ağustos 2014, pp.1-5

- **A web based controlled greenhouse system and monitoring the system's data**

İLHAN H. O. , Elçiçek S., Buldu A., Savaş K.  
Marmara University

## Supported Projects

AYDIN N., İLHAN H. O. , Project Supported by Higher Education Institutions, Biyomedikal Görüntülerde Hareketli Nesnelerin Analizi ve Takibi İçin Donanımsal Bir Sistem Gerçekleşmesi, 2016 - 2018

## Scientific Refereeing

Innovation and Research in Biomedical Engineering, SCI Journal, November 2017

Innovation and Research in Biomedical Engineering, SCI Journal, November 2017

Innovation and Research in Biomedical Engineering, SCI Journal, September 2017

Innovation and Research in Biomedical engineering, SCI Journal, September 2017

Innovation and Research in Biomedical Engineering, SCI Journal, June 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, June 2016

## Citations

Total Citations (WOS):8

h-index (WOS):1