

Academic Background

1. **Name Lastname** : Türker Tekin Ergüzel
2. **Date & Place of Birth** : Sakarya, 19.01.1978
3. **Title** : Assoc. Prof.
4. **English** : 90 (ÜDS)

Degree	Field	University	Year
BS	Computer & Control Technology	Marmara University	2000
MS	Computer & Control Education	Marmara University	2003
PhD	Computer & Control Education	Marmara University	2009

5. Academic Titles:

- | | | | |
|---------------------|--------------|----------------------|---|
| Asst. Prof. | : 01.09.2010 | - Arel University | - Dept. Of Computer Engineering |
| Asst. Prof. | : 02.07.2012 | - Uskudar University | - Dept. Of Computer Engineering |
| Assoc. Prof. | : 04.06.2018 | - Uskudar University | - Computer Engineering (Field of Application) |

6. Guided MS and PhD Theses

6.1. MS Thesis

- İki Serbestlik Dereceli Hareket Kontrolü İçin Zihinsel Görev Sınıflandırma Tabanlı Beyin-Bilgisayar Arayüzü Tasarımı, Çağlar Uyulan.
- The development of mobile software to transfer the declaration of non-conformity into occupational health and safety automation systems where internet is inaccessible, Hayati Özen.
- Applications in corporate enterprises towards the goal of zero accidents, Adem Bölükbaşı.

7. Publications

7.1. Published Articles in International Journals (SCI & SCIE)

1. **Ergüzel TT.**, Akbay E., "Process Control Using Genetic Algorithm and Ant Colony Optimization Algorithm ", Journal of Intelligent Fuzzy Systems, 26 (2014), <http://dx.doi.org/10.3233/IFS-131003>.
2. Ozekes S., **Ergüzel TT.**, Hizli Sayar G., Tarhan Nevzat" Analysis of Brain Functional Changes in High-Frequency Repetitive Transcranial Magnetic Stimulation in Treatment-Resistant Depression", Clinical EEG & Neuroscience, (2014), <http://dx.doi.org/10.1177/1550059413515656>.
3. **Ergüzel TT.**, Ozekes S., Tan O., Gultekin S., "Feature selection and classification of electroencephalogram signals: An artificial neural network and genetic algorithm-based approach", Clinical EEG & Neuroscience, (2014), <http://dx.doi.org/10.1177/1550059414523764>.
4. **Ergüzel TT.**, Ozekes S., Gultekin, S., Tarhan N., "Ant Colony Optimization Based Feature Selection Method for QEEG Data Classification", Psychiatry Investigation, (2014), <http://dx.doi.org/10.4306/pi.2014.11.3.243> .
5. **Ergüzel TT.**, Ozekes S., Gultekin S., Tarhan N., Hizli Sayar G., Bayram A., Neural Network Based Response Prediction of rTMS in Major Depressive Disorder Using QEEG Cordance, Psychiatry Investigation, (2014), <http://dx.doi.org/10.4306/pi.2015.12.1.61>.
6. **Ergüzel TT.**, Ozekes S., Hizli Sayar G., Tan O., Tarhan N., "A Hybrid Artificial Intelligence Method to Classify Trichotillomania and Obsessive Compulsive Disorder", Neurocomputing, (2015), <http://dx.doi.org/10.1016/j.neucom.2015.02.039>.
7. **Ergüzel TT.**, Hizli Sayar G., Tarhan N., "Artificial Intelligence Approach To Classify Unipolar And Bipolar Disorders", Neural Computing & Applications, (2015), 10.1007/s00521-015-1959-z.
8. **Ergüzel TT.**, Tas C., Cebi M., "A Wrapper-Based Approach for Feature Selection and Disorder Classification ", Computers in Biology and Medicine, (2015), 10.1016/j.comp biomed.2015.06.021.
9. Taş C., Mogulkoc H., Eryilmaz G., Gogceoz I., **Ergüzel TT.**, Metin B., Tarhan N., Discriminating schizophrenia and schizo-obsessive disorder: a structural MRI study combining VBM and machine learning methods, Neural Computing & Applications, (2016), 10.1007/s00521-016-2451-0.
10. Uyulan Ç., **Ergüzel TT.**, Analysis of Time-Frequency EEG Feature Extraction Methods for Mental Task Classification, International Journal of Computational Intelligence Systems, (2017), Vol. 10, 1280–1288.
11. Tekin H.O., Kara Ü., Manıcı T., **Ergüzel TT.**, A Prediction Study On Bremsstrahlung Photon Flux of Tungsten (W) As a Radiological Anode Material by Using Mncpx and Artificial Neural Network (ANN) Modeling, Acta Physica Polonica A, (2017), 10.12693/APhysPolA.132.433.
12. Metin SZ., **Ergüzel TT.**, Gulhan E., Salcini C., Kocarslan B., Cebi M., Metin B., Tanridag O., Tarhan N., "The Use of Quantitative EEG for Differentiating Frontotemporal Dementia From Late-Onset Bipolar Disorder", Clinical EEG & Neuroscience, (2017), <https://doi.org/10.1177/1550059417750914>.
13. **Ergüzel TT.**, Tekin HO., Manici T., Altunsoy EE., Tarhan N., Comparison of Multiple Linear Regression Analysis and ANN Approaches in the Estimation of Monte Carlo Mean Glandular Dose Calculations of Mammography, Digest Journal of Nanomaterials and Biostructures, 13,1; pp. 163-176, (2018).
14. Tekin HO., Sayyeds MI., **Ergüzel TT.**, Karahan M., Kilicoglu O., Mesbahi A., Kara U., Investigation of Water Equivalence and Shielding Properties of Different Solid Phantoms Using MCNPX Code, Digest Journal of Nanomaterials and Biostructures, 13(2); pp. 551-562,(2018).
15. Tekin HO., **Ergüzel TT.**, Sayyeds MI., Singh VP., Manici T., Altunsoy EE., Agar O., An investigation on Shielding Properties of Different Granite Samples Using MCNPX Code, Digest Journal of Nanomaterials and Biostructures, 13(2), pp.381-389, (2018).
16. Tekin HO., **Ergüzel TT.**, Karahan M., Manici T., Konuk M., Tarhan N., Investigation On Some Antioxidants Using MCNPX Monte Carlo Code, Journal of Biological Physics, DOI: 10.1007/s10867-018-9507-6,(2018).
17. Tekin HO., Altunsoy EE., Karahan M., Sayyed MI., Ergüzel TT., Kasikci ES., Gamma Shielding Properties of Erbium Zinc Tellerute Glass System Using Monte Carlo Method, Journal of Testing and Evaluation, <https://doi.org/10.1520/JTE20180123>.
18. Metin B., Sütçübaşı B., Taş C., **Ergüzel TT.**, Metin SZ., Arıkan K., Tarhan N., Anatomical Connectivity Changes in Bipolar Disorder and Schizophrenia Investigated Using Whole Brain Tract-Based Spatial Statistics and Machine Learning Approaches, Neural Computing and Applications, in Press (2018).
19. Uyulan Ç., **Ergüzel TT.**, Tarhan N., Entropy-Based Feature Extraction Technique in Conjunction With Wavelet Packet Transform For Multi Mental Task Classification, Biomedical Engineering - Biomedizinische Technik, in Press (2018).
20. **Ergüzel TT.**, Noyan CO., Eryilmaz G., Çebi M., Taş C., Dilbaz N., Tarhan N., Binomial Logistic Regression and Artificial Neural Network Methods to Classify Opioid Dependent Subjects and Control Group Using Quantitative EEG Power Measures, Clinical EEG and Neuroscience, in Press (2018).

7.2. Published Articles in Other International Journals

1. **Erguzel TT.**, "A Hybrid PSO-PID Approach For Trajectory Tracking Application of A Liquid Level Control Process", An International Journal of Optimization and Control: Theories & Applications (IJOCTA), 5 (2),2015, 10.11121/ijocta.01.2015.00244.
2. Uyulan Ç., **Erguzel TT.**, Comparison of Wavelet Families for Mental Task Classification, The Journal of Neurobehavioral Sciences (2016), 10.5455/JNBS.1454666348.
3. Tekin HO., **Erguzel TT.**, Karahan M., Konuk M., Tarhan N., Radiation Attenuation Properties Of Human Brain Regions According To Elemental Composition In Radiological Energy Range: A Monte Carlo Simulation, The Journal of Neurobehavioral Sciences (2018), 10.5455/JNBS.1521311225.

7.3. Presented Papers at International Conference (Proceedings)

1. **Erguzel TT.**, "Modeling and Controlling of a Real Time System to Simulate Offline Experiments", International Educational Technology Conference, Sarajevo, 2010.
2. **Erguzel TT.**, Akbay E., "Fuzzy Controller Parameter Optimization using Swarm Optimization", Intelligent Manufacturing Systems", Istanbul, 2010.
3. **Erguzel TT.**, Ozekes S., " Trajectory Tracking Performance Comparison of Genetic Algorithm and ACO for Fuzzy Controller Tuning on Water Level Process", International Science and Technology Conference, Istanbul, 2011.
4. **Erguzel TT.**, "Fuzzy Controller Parameter Optimization Using Genetic Algorithm for a Real Time Controlled System", ICCIIS, London, 2013.
5. **Erguzel TT.**, Ozekes S. Bayram A., Tarhan N., "Classification of Major Depressive Disorder Subjects Using Pre-rTMS Electroencephalography Data with Support Vector Machine Approach", SAI Conference, London, 2014.
6. **Erguzel TT.**, Ozekes S., Tarhan N., "Artificial Intelligence Approaches to Psychiatric Disorders", ECNS Conference, Halifax, 2014.
7. **Erguzel TT.**, Tarhan N., "Machine Learning Approaches to Predict Repetitive Transcranial Magnetic Stimulation Treatment Response in Major Depressive Disorder", SAI Intelligent Systems Conference, London, 2016
8. **Erguzel TT.**, H.O. Tekin, Principle Component Analysis for Dimensionality Reduction of Large Mass Spectrometry Imaging Data Sets, ICCESEN, Antalya, 2017.
9. Uyulan Ç., **Erguzel TT.**, Arslan E., Mobile Robot Localization Via Sensor Fusion Algorithms, IEEE Intell. Sys. Conf. 2017, London.
10. **Erguzel TT.**, Tarhan N., Entropy-based wavelet packet transform method for multi-mental task classification, SBMT, LA, 2018.

7.6. Presented Papers at Nationals Conference

1. **Erguzel T.T.** "Karınca Koloni Optimizasyonu Algoritması ile Yörünge Takibi", UMES 2007, Kocaeli, Ekim 2007.
2. **Erguzel T.T.** "Sıvı Seviye Kontrolü İçin Bulanık Kontrolör Parametrelerinin Karınca Koloni ve Genetik Algoritma ile Optimizasyonu", TOK 2009, İstanbul, Aralık 2009.
3. Ozekes S., **Erguzel T.T.**, "Tekrarlı Transkranal Manyetik Uyarım Tedavi Yöntemi Sonucunun EEG Tabanlı Tahmin Edilmesi", TIPTEKNO 2014, Kapadokya, Eylül 2014.
4. **Erguzel T.T.** "Medikal Veri Analizinde İstatistiksel Yaklaşım", ELECO 2016, Bursa, Aralık 2016.
5. **Erguzel T.T.** "Artificial Intelligence Applications in Addictive Disorders", Ulusal Alkol ve Madde Bağımlılığı Kongresi, 2016, Antalya.

8. Projects

- 8.1. International Projects
- 8.2. National Projects

9. Administrative Experience

- Head of Health Science Institution,
- Vice head of Project & Research Center,
- Head of Software Engineering,
- Head of Artificial Intelligence & Smart Systems Research and Application Center

10. List of Awards

Bachelor Degree with 1st Class Honours

11. Lessons given for BSc and MS for the last two years

Academic Year	Semester	Course	Credits		Number of Students
			Theoretical	Practical	
2017-2018	Fall	Discrete Mathematics	3	0	50
		Operating Systems	3	0	45
	Spring	Real Time Systems	3	0	9
		Computer Architecture	3	0	50
2018-2019	Fall	Discrete Mathematics	3	0	50
		Operating Systems	3	0	45
	Spring	Statistics and Probability	3	0	50
		Computer Architecture	3	0	40
		Real Time Systems	3	0	20

12. Contact Information

E-mail : turker.erguzel@uskudar.edu.tr Tel: 0216 400 22 22 / 2407
Address : Altunizade Mah. Haluk Türksoy Sk. No:14 PK:34662 Üsküdar / İstanbul / Türkiye