Prof. SAMİ ARICA

Personal Information

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International Researcher IDs
ORCID: 0000-0002-3820-029X
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Education Information

Doctorate, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1993 - 1999
Postgraduate, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1990 - 1993
Undergraduate, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 1982 - 1988

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Education Management and Planning, The Abdus Salam International Centre For Theoretical Physics, School On Mathematical Problems On Image Processing, 2000

Dissertations

Doctorate, The Best Subbands Which Maximize Coding Gain With Application To Still Images, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1999
Postgraduate, Some Investigations Of Including Multiple Sound Channels In TV Systems, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1993

Research Areas

Information Systems, Communication and Control Engineering, Signal Processing, Multi-mode Signal Processing, Image and Video Processing, Pattern Recognition and Analysis, Signal Processing Theory and Methods, Biomedical Engineering, Bioengineering and MEMS, Bioinstrumentation and Microelectromechanical Systems (MEMS), Biomedical Image Processing, Biomedical Image Processing, Biosignal Processing, Biosignal Processing, Rehabilitation, Rehabilitation,

Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1999 - Continues

Lecturer, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1995 - 1999

Research Assistant, Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1990 - 1995

Academic and Administrative Experience

Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 1999 - 2006

Cukurova University, Mühendislik-Mimarlık Fakültesi, 2003 - 2005

Cukurova University, Mühendislik-Mimarlık Fakültesi, Elektrik-Elektronik Mühendisliği Bölümü, 2000 - 2003

Courses

Digital Television, Undergraduate, 2013 - 2014

Digital Image Processing, Postgraduate, 2013 - 2014

Signals and Systems, Undergraduate, 2013 - 2014

Adaptive Filter Theory, Doctorate, 2013 - 2014

Biomedical Signal Processing, Postgraduate, 2013 - 2014

Multirate Filter Banks and Wavelets, Doctorate, 2013 - 2014

Digital Signal Processing, Undergraduate, 2013 - 2014

Analog Communications Systems, Undergraduate, 2013 - 2014

Digital Signal Processing, Postgraduate, 2013 - 2014

Digital Communication Systems, Undergraduate, 2012 - 2013

Advising Theses

ARICA S., Classification of hand movements with electromyogram signals obtained from arm muscles: generating control signals for hand prosthesis, Postgraduate, R.Dizbari(Student), 2013

ARICA S., R-peak Detection with Wavelet Transform, Postgraduate, C.Sakarya(Student), 2013

ARICA S., Depiction Of Hemorrhagic Regions Caused By Diabetic Retinopathy On Fundus Flourescein Angiography Images By Using Image Enhancement And Basic Classification Methods, Postgraduate, İ.Çetin(Student), 2012

ARICA S., Analysis And Classification Of Visually Evoked EEG Using Multiresolution Approximation., Doctorate, U.Çelik(Student), 2010

ARICA S., Analysis and Classification of EEG with Adapted Wavelets and Local Discriminant Bases, Doctorate, N.Fırat(Student), 2006

ARICA S., A New Orthogonal Scaling-Wavelet Function Pair Based on Excitatory Postsynaptic Potential Function, Postgraduate, M.Kanal(Student), 2006

ARICA S., Real Time Monitoring of Electrocardiography and Blood Volume Using RTAI on Linux, Postgraduate, F.Kumru(Student), 2006

ARICA S., A Computer Based Data Acquisition and Signal Processing System for Measuring the Baroreceptor Sensitivity, Postgraduate, N.Fırat(Student), 2002

ARICA S., Decomposition by Tree Structure to Obtain the Best Subband Division by Using Uniform Filter Banks, Postgraduate, T.Akbaş(Student), 2001

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Optimising Yield Estimation for Grapes: Utilising the Sliding Window Technique for Visual Counting of Bunches and Berries**
Falih B. S., Ali Y. H., Alabbas A. R., ARICA S.
Pakistan Journal of Agricultural Sciences, vol.61, no.2, pp.525-533, 2024 (SCI-Expanded)

II. **Automatic counting of grapes from vineyard images**
Al-Saffar B., ARICA S., TANGOLAR S.
PAKISTAN JOURNAL OF AGRICULTURAL SCIENCES, vol.59, no.3, pp.347-355, 2022 (SCI-Expanded)

III. **Familiar/unfamiliar face classification from EEG signals by utilizing pairwise distant channels and distinctive time interval**
Ozbeyaz A., ARICA S.
SIGNAL IMAGE AND VIDEO PROCESSING, vol.12, no.6, pp.1181-1188, 2018 (SCI-Expanded)

IV. **Predicting tumor recurrence in patients with cervical carcinoma treated with definitive chemoradiotherapy: value of quantitative histogram analysis on diffusion-weighted MR images**
Erbay G., Onal C., Karadeli E., Guler O. C., ARICA S., Koc Z.
ACTA RADIOLOGICA, vol.58, no.4, pp.481-488, 2017 (SCI-Expanded)

V. **Classification of EEG signals of familiar and unfamiliar face stimuli exploiting most discriminative channels**
Ozbeyaz A., ARICA S.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.25, no.4, pp.3342-3354, 2017 (SCI-Expanded)

VI. **Classification of evoked potentials of familiar and unfamiliar face stimuli using multi-resolution approximation based on excitatory post-synaptic potential waveform**
Çelik U., ARICA S.
COMPUTERS & ELECTRICAL ENGINEERING, vol.39, no.5, pp.1571-1584, 2013 (SCI-Expanded)

VII. **Prediction of pharmacologically induced baroreflex sensitivity from local time and frequency domain indices of R-R interval and systolic blood pressure signals obtained during deep breathing**
ARICA S., Ince N. F., BOZKURT A., Tewfik A. H., Birand A.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.41, no.7, pp.442-448, 2011 (SCI-Expanded)

VIII. **High Accuracy Decoding of Movement Target Direction in Non-Human Primates Based on Common Spatial Patterns of Local Field Potentials**
Ince N. F., Gupta R., ARICA S., Tewfik A. H., Ashe J., Pellizzer G.
PLOS ONE, vol.5, no.12, 2010 (SCI-Expanded)

IX. **Predictability of baroreflex sensitivity induced by phenylephrine injection via frequency domain indices computed from heart rate and systolic blood pressure signals during deep breathing**
ARICA S., Ince N. F., BOZKURT A., Birand A., Tewfik A. H.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.5, no.4, pp.292-298, 2010 (SCI-Expanded)

X. **Adapting subject specific motor imagery EEG patterns in space-time-frequency for a brain computer interface**
Ince N. F., Goksu F., Tewfik A. H., ARICA S.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.4, no.3, pp.236-246, 2009 (SCI-Expanded)

XI. **Extraction subject-specific motor imagery time-frequency patterns for single trial EEG classification**
Ince N. F., Tewfik A. H., Arica S.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.37, no.4, pp.499-508, 2007 (SCI-Expanded)

XII. **Classification of single trial motor imagery EEG recordings with subject adapted non-dyadic arbitrary time-frequency tilings**
Ince N. F., Arica S., Tewfik A.
JOURNAL OF NEURAL ENGINEERING, vol.3, no.3, pp.235-244, 2006 (SCI-Expanded)

XIII. **Anaerobic Threshold and EMG Activity During Incremental Cycling Exercise**
ÖZGÜNEN K. T., ARICA S., Akkurt E., KORKMAZ ERYILMAZ S. G., ASLANKESER Z., Firat A., KURDAK S. S.

Medicine And Science In Sports And Exercise, vol.38, pp.24, 2006 (SCI-Expanded)

Articles Published in Other Journals

I. **On The Classification of Hand Movements with Electromyogram Signals Obtained From Arm Muscles for Controlling Hand Prosthesis**
ARICA S., Ara R. K., ÖZGÜNEN K. T.
ISTANBUL UNIVERSITY-JOURNAL OF ELECTRICAL AND ELECTRONICS ENGINEERING, vol.17, no.2, 2017 (ESCI)

II. **ELECTROMYOGRAPHIC CHARACTERISTICS OF THE QUADRICEPS FEMORIS DURING PERFORMANCE OF THE WINGATE TEST**
ASLANKESER Z., ARICA S.
KINESIOLOGIA SLOVENICA, vol.23, no.1, pp.33-41, 2017 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

I. **Motor Imagery Events Classification by Utilizing Covariance and Correlation Matrices Generated from Electroencephalogram Signals Elektroensefalogram Sinyallerinden Oluşturulan Kovaryans ve Korelasyon Matrislerini Kullanarak Harekete Dair Olayların Hayalinin Sınıflandırılması**
Mendi S., ARICA S.
32nd IEEE Conference on Signal Processing and Communications Applications, SIU 2024, Mersin, Turkey, 15 - 18 May 2024

II. **Classification and Segmentation of Watermelon in Images Obtained by Unmanned Aerial Vehicle**
EKİZ A., ARICA S., BOZDOĞAN A. M.
ELECO - 11th International Conference on Electrical and Electronics Engineering, 28 - 30 November 2019

III. **The Effects of Sprint Training on Muscle Isometric Force and EMG Frequency Activity**
ASLANKESER Z., KORKMAZ ERYILMAZ S., ÖZGÜNEN K. T., ÖZDEMİR Ç., ARICA S., KURDAK S. S.
International Workshop and Conference on Human Reflexes, İzmir, Turkey, 11 May 2009, pp.94

IV. **Anaerobic threshold and EMG activity during incremental cycling exercise.**
ÖZGÜNEN K. T., ARICA S., akkurt e., KORKMAZ ERYILMAZ S., ASLANKESER Z., fırat a., KURDAK S. S.
ACSM's Conference on Integrative Physiology of Exercise, Indianapolis, United States Of America, 28 - 30 September 2006, pp.32

Supported Projects

ARICA S., AVŞAR T. S., Project Supported by Higher Education Institutions, AUTOMATIC SEGMENTATION OF COMPUTED TOMOGRAPHY IMAGES OF LIVER USING WATERSHED AND THRESHOLDING ALGORITHMS, 2016 - 2017
ARICA S., Project Supported by Higher Education Institutions, Classification of evoked potentials of familiar and unfamiliar face stimuli using multi-resolution approximation based on excitatory post-synaptic potential waveform, 2014 - 2016

Metrics

Publication: 37
Citation (WoS): 217
Citation (Scopus): 255
H-Index (WoS): 5
H-Index (Scopus): 6

Non Academic Experience

Page Europe S.P.A. Izmir Yerleşkesi