### Asst. Prof. REİS BURAK ARSLAN

### **Personal Information**

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#### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAA-8173-2020

ScopusID: 55293774400 Yoksis Researcher ID: 133021

### **Education Information**

Doctorate, Bogazici University, Institute Of Biomedical Engineering, Department Of Biomedical Electronics, Turkey 1991 - 2000

Postgraduate, Bogazici University, Institute Of Biomedical Engineering, Department Of Biomedical Electronics, Turkey 1988 - 1991

Undergraduate, Istanbul Technical University, Bilgisayar Ve Bilişim Fakültesi, Bilgisayar Mühendisliği Bölümü, Turkey 1983 - 1988

# Foreign Languages

French, C1 Advanced English, C1 Advanced Italian, C1 Advanced

### **Research Areas**

Computer Sciences, Biomedical Engineering

### **Academic Titles / Tasks**

Assistant Professor, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisligi, 2005 - Continues

# Academic and Administrative Experience

Fakülte Yönetim Kurulu Üyesi, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisligi, 2017 - Continues

Enstitü Yönetim Kurulu Üyesi, Galatasaray University, Fen Bilimleri Enstitüsü, -, 2010 - Continues Head of Department, Galatasaray University, Mühendislik Ve Teknoloji Fakültesi, Bilgisayar Mühendisliği Bölümü, 2012 -2017

### **Courses**

Mikroişlemciler, Undergraduate, 2023 - 2024, 2021 - 2022
SAYISAL ELEKTRONİK, Undergraduate, 2023 - 2024
İnsan Bilgisayar Etkileşimine Giriş, Undergraduate, 2023 - 2024
İNSAN BİLGİSAYAR ETKİLEŞİMİ, Postgraduate, 2023 - 2024
SAYISAL İŞARET İŞLEME, Undergraduate, 2022 - 2023
İnsan Bilgisayar Etkileşiminde Temel Kavramlar ve İleri Teknolojiler, Postgraduate, 2022 - 2023
Sinyaller ve Sistemler, Undergraduate, 2021 - 2022

## **Advising Theses**

Arslan R. B., DESIGN AND IMPLEMENTATION OF A SMART WRISTBANDFOR MONITORING PHYSIOLOGICAL AND EMOTIONAL STATUSOF THE USER, Postgraduate, Ç.CANDAN(Student), 2022

Arslan R. B., Simulation based analysis of driver's stress level using physiological signals, Postgraduate, Ö.GÜNAYDIN(Student), 2021

Arslan R. B., Use of brain computer interfaces in main control of video games and in dynamic difficulty adjustment, Postgraduate, E.FİLİZ(Student), 2021

Arslan R. B., A web-based toolkit for recording and analysis of physiological signals in response to affective and cognitive stressors, Postgraduate, K.BEŞKARDEŞLER(Student), 2019

ARSLAN R. B., A surface electromyography based serious computer game for physiotherapy and rehabilitation, Postgraduate, T.GÜNAYDIN(Student), 2018

ARSLAN R. B., A portable and embedded SSVEP BCI system: emBCI, Postgraduate, O.ÇAĞLAYAN(Student), 2014 ARSLAN R. B., Classification of Cohesin family using class-specific motifs, Postgraduate, M.ERCÜMENT(Student), 2013 ARSLAN R. B., Les applications d'interaction humain - ordinateur, Postgraduate, M.YILMAZ(Student), 2010

# Published journal articles indexed by SCI, SSCI, and AHCI

AUDIOLOGY, vol.40, no.2, pp.55-62, 2001 (SCI-Expanded)

I. Digital subtraction method for transient evoked otoacoustic emission recording with ipsilateral noise suppression: An application to stimulus artifact reduction Arslan R. B., Ozdamar O., Ulgen Y.

# Articles Published in Other Journals

I. Wireless health monitoring for multiple patients on android phone with embedded computation PINARER Ö., Parmaksiz A., Ibrahim A., ARSLAN R. B., ÖZGÖVDE B. A. Biomedical Engineering, vol.9, no.1, pp.569, 2012 (Scopus)

# Refereed Congress / Symposium Publications in Proceedings

- I. A Wearable System Implementation for the Internet of Medical Things (IoMT)
   ARSLAN R. B., Candan Ç.
   44th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2022,
  - 44th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2022, Glasgow, England, 11 15 July 2022, vol.2022-July, pp.2447-2450
- II. Enhancement of Player Experience in Video Games Using EEG Based Dynamic Difficulty Adjustment Burak Arslan R. B., Filiz E.
  - 16th International Conference on INnovations in Intelligent SysTems and Applications, INISTA 2022, Biarritz,

France, 8 - 12 August 2022

### III. Stress Level Detection Using Physiological Sensors

Gunaydin O., ARSLAN R. B.

20th IEEE International Conference on Bioinformatics and Bioengineering, BIBE 2020, Ohio, United States Of America, 26 - 28 October 2020, pp.509-512

# IV. Design and Implementation of Steady State Visual Evoked Potential Based Brain Computer Interface Video Game

Filiz E., ARSLAN R. B.

20th IEEE Mediterranean Electrotechnical Conference, MELECON 2020, Palermo, Italy, 15 - 18 June 2020, pp.335-338

# V. Design and Implementation of Steady State Visual Evoked Potential Based Brain Computer Interface Video Game

Filiz E., ARSLAN R. B.

28th Signal Processing and Communications Applications Conference (SIU), ELECTR NETWORK, 5 - 07 October 2020

# VI. Implementation of a Simulated Environment for Data Acquisition to Monitor Drivers'xx Stress Levels ARSLAN R. B.

2019 SCIENTIFIC MEETING ON ELECTRICAL-ELECTRONICS BIOMEDICAL ENGINEERING AND COMPUTER SCIENCE (EBBT), İstanbul, Turkey, 24 - 26 April 2019

# VII. Web-Based Evaluation of User Stress Using Stroop Test and Wearable Hardware

Beskardesler K., ARSLAN R. B.

11th International Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 28 - 30 November 2019, pp.959-962

# VIII. LOWER-LIMB FOLLOW-UP: A Surface Electromyography Based Serious Computer Game and Patient Follow-Up System For Lower Extremity Muscle Strengthening Exercises in Physiotherapy and Rehabilitation

Gunavdin T., ARSLAN R. B.

32nd IEEE International Symposium on Computer-Based Medical Systems (IEEE CBMS), Cordoba, Argentina, 5 - 07 June 2019, pp.507-512

# IX. Implementation of a Simulated Environment for Data Acquisition to Monitor Drivers' Stress Levels ARSLAN R. B., Gunaydin O.

International Scientific Meeting on Electrical-Electronics and Biomedical Engineering and Computer Science (EBBT), İstanbul, Turkey, 24 - 26 April 2019

# X. A Surface Electromyography Based Serious Game For Increasing Patient Participation To Physiotherapy and Rehabilitation Treatment Following Anterior Cruciate and Medial Collateral Ligaments Operations

Gunaydin T., ARSLAN R. B., ÇINAR B., Cirak Y., Elbasi N. D.

31st IEEE International Symposium on Computer-Based Medical Systems (CBMS), Karlstad, Sweden, 18 - 21 June 2018, pp.438-439

### XI. Analysis of Visual Stimulus Parameters for SSVEP Based Brain Computer Interfaces

Saylam B., Caglayan O., ARSLAN R. B.

18th National Biomedical Engineering Meeting (BIYOMUT), İstanbul, Turkey, 16 - 17 October 2014

## XII. Robotic arm control with brain computer interface using P300 and SSVEP

Çağlayan O., ARSLAN R. B.

10th IASTED International Conference on Biomedical Engineering, BioMed 2013, Innsbruck, Austria, 13 - 15 February 2013, pp.141-144

### XIII. Classification of cohesin family using class specific motifs

Eser E. M., ARSLAN R. B., Sezerman U. O.

2013 8th International Symposium on Health Informatics and Bioinformatics, HIBIT 2013, Ankara, Turkey, 25 - 27 September 2013

# XIV. Energy aware activity level monitoring with accelerometers

PINARER Ö., ARSLAN R. B., ÖZGÖVDE B. A.

16th National Biomedical Engineering Meeting (BIYOMUT2012), Turkey, 3 - 05 October 2012

XV. Wireless health monitoring of multiple patients on android phone with embedded computation PINARER Ö., Parmaksiz A., Avci I., Arslan B., Ozgovde A.

9th IASTED International Conference on Biomedical Engineering, BioMed 2012, Innsbruck, Austria, 15 - 17 February 2012, pp.569-573

# XVI. P300 based auditory visual brain computer interface P300 tabanli işitsel görsel beyin bilgisayar bağlantisi

Çağlayan O., ARSLAN R. B.

2012 20th Signal Processing and Communications Applications Conference, SIU 2012, Fethiye, Mugla, Turkey, 18 - 20 April 2012

### XVII. Wireless monitoring of health data via an open platform

PINARER Ö., ARSLAN R. B., ÖZGÖVDE B. A.

15th National Biomedical Engineering Meeting (BIYOMUT2011), Turkey, 13 - 16 October 2011

### XVIII. Extending the wireless monitoring period for e health applications

PINARER Ö., ARSLAN R. B., ÖZGÖVDE B. A.

Akademik Bilisim AB'11, Turkey, 2 - 04 February 2011

### XIX. A real time music synthesis environment driven with biological signals

Arslan B., Brouse A., Castet J., Lehembre R., Simon C., Filatriau J. J., Noirhomme Q.

31st IEEE International Conference on Acoustics, Speech and Signal Processing, Toulouse, France, 14 - 19 May 2006, pp.2420-2423

### XX. Biologically driven musical instrument

ARSLAN R. B., Brouse A.

Enterface 05, 1 - 03 May 2005

# XXI. Epileptiform activity induction with electrolyte imbalance in brain slices: Mechanisms involved in control

Saybasili H., Arslan R. B.

23rd Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society, İstanbul, Turkey, 25 - 28 October 2001, vol.23, pp.947-950

## XXII. Smart-IPM: An adaptive tool for the preventive maintenance of medical equipment

Arslan R. B., Ulgen Y.

23rd Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society, İstanbul, Turkey, 25 - 28 October 2001, vol.23, pp.3950-3953

## **Supported Projects**

ARSLAN R. B., Project Supported by Higher Education Institutions, HERYERDE BİLİŞİM İÇİN AKILLI GİYSİ UYGULAMALARI, 2016 - 2019

ARSLAN R. B., Project Supported by Higher Education Institutions, SÜRÜCÜ DAVRANIŞLARININ SANAL BENZETİM ORTAMINDA TAKİBİ, 2016 - 2019

ARSLAN R. B., Project Supported by Higher Education Institutions, İNSAN-MAKİNA ETKİLEŞİMİNDE ÖZEL BİR UYGULAMA: İNSANSI ROBOTLARLA ÇOK KİPLİ ETKİLEŞİM, 2012 - 2015

ARSLAN R. B., Project Supported by Higher Education Institutions, İNSAN BİLGİSAYAR ETKİLEŞİMİNDE DERİ DİRENCİ DEĞİŞİKLİKLERİNİN İNCELENMESİ, 2011 - 2014

ARSLAN R. B., Project Supported by Higher Education Institutions, BEYİN- BİLGİSAYAR BAĞLANTISINA AİT BİR UYGULAMA: SANAL TUŞTAKIMI, 2008 - 2012

ARSLAN R. B., Project Supported by Higher Education Institutions, DİKKAT SEVİYESİNDEKİ DEĞİŞİMLERİN ELEKTROFİZYOLOJİK ÖLÇÜMLER İLE İZLENMESİ, 2008 - 2011

# Metrics

Publication: 24 Citation (WoS): 13 Citation (Scopus): 47 H-Index (WoS): 2 H-Index (Scopus): 4