### Asst. Prof. ULYA BAYRAM



### **Personal Information**

Email: ulya.bayram@comu.edu.tr

Web: https://avesis.comu.edu.tr/ulyabayram

#### **International Researcher IDs**

ScholarID: xPn709cAAAAJ ORCID: 0000-0002-8150-4053

Publons / Web Of Science ResearcherID: U-7459-2019

ScopusID: 57195324891 Yoksis Researcher ID: 333819

### **Education Information**

Doctorate, University of Cincinnati, College of Engineering and Applied Science, Computer Science and Engineering, United States Of America 2013 - 2019

Doctorate, University of Miami, College of Arts and Sciences, Computer Science (transferred to Uni. of Cincinnati), United States Of America 2013 - 2014

Postgraduate, Middle East Technical University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 2011 - 2013

Undergraduate, Universidad Autonoma de Madrid, Faculty of Engineering, ELECTRICAL AND ELECTRONICS ENGINEERING (Erasmus Exchange), Spain 2008 - 2009

Undergraduate, Ihsan Dogramaci Bilkent University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering, Turkey 2005 - 2009

### Foreign Languages

English, C2 Mastery Spanish, B1 Intermediate

## **Certificates, Courses and Trainings**

IT, IBM Neuro-Symbolic AI Summer School, IBM, 2022

IT, Deep Learning, Neuromatch Academy, 2021

Other, Data or Specimens Only Research, The Collaborative Institutional Training Initiative (CITI Program), 2021 Vocational Training, Net-COVID Workshop: Understanding and Exploring Network Epidemiology in the Time of Coronavirus, University of Maryland, 2020

Vocational Course, Introduction to Dynamical Systems and Chaos, Santa Fe Institute, 2016 Vocational Training, Complex Systems Summer School 2016, Santa Fe Institute, 2016 Vocational Training, Formal Techniques Summer School, SRI International, 2014

## Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Computer Learning, Natural Language Processing, Text/Document Processing, Pattern Recognition and Image Processing, Neural Networks

# **Academic Titles / Tasks**

Assistant Professor, Canakkale Onsekiz Mart University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, 2021 - Continues

Researcher, University of Cincinnati, College of Engineering and Applied Science, Computer Science and Engineering, 2014 - 2016

Researcher, University of Miami, College of Arts and Sciences, Computer Science, 2013 - 2014

## Academic and Administrative Experience

Uygulama ve Araştırma Merkezi Yönetim Kurulu Üyesi, Canakkale Onsekiz Mart University, insan ve Toplum Bilimleri Fakültesi-------, Data Analytics Application and Research Center, 2021 - Continues

## Courses

Makine Öğrenmesi, Postgraduate, 2023 - 2024

Derin Öğrenme, Postgraduate, 2023 - 2024

Scientific Research and Ethics, Postgraduate, 2023 - 2024

Natural Language Processing Methods, Postgraduate, 2023 - 2024

Artificial Neural Networks, Undergraduate, 2022 - 2023, 2021 - 2022

Fundamentals of Machine Learning for Medical Domain, Undergraduate, 2021 - 2022

Natural Language Processing, Postgraduate, 2021 - 2022

# Jury Memberships

Doctorate, Doctorate, Çanakkale Onsekiz Mart Üniversitesi, June, 2024

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, December, 2023

PhD Thesis Monitoring Committee Member, PhD Thesis Monitoring Committee Member, Çanakkale Onsekiz Mart Üniversitesi, June, 2023

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

- I. The unknown knowns: a graph-based approach for temporal COVID-19 literature mining Bayram U., Roy R., Assalil A., Benhiba L. ONLINE INFORMATION REVIEW, vol.45, no.4, pp.687-708, 2021 (SCI-Expanded)
- II. A Machine Learning Approach to Identifying Changes in Suicidal Language Pestian J., Santel D., Sorter M., Bayram U., Connolly B., Glauser T., Delbello M., Tamang S., Cohen K. SUICIDE AND LIFE-THREATENING BEHAVIOR, vol.50, pp.939-947, 2020 (SSCI)
- III. A nonparametric Bayesian method of translating machine learning scores to probabilities in clinical decision support

Connolly B., Cohen K. B., Santel D., Bayram U., Pestian J. BMC BIOINFORMATICS, vol.18, 2017 (SCI-Expanded)

# Articles Published in Other Journals

I. Revealing the Reflections of the Pandemic by Investigating COVID-19 Related News Articles Using Machine Learning and Network Analysis

Bayram U.

Journal of Information Technologies, vol.15, no.2, pp.209-220, 2022 (Peer-Reviewed Journal)

II. Toward Suicidal Ideation Detection with Lexical Network Features and Machine Learning Bayram U., Lee W., Santel D., Minai A., Clark P., Glauser T., Pestian J.

Northeast Journal of Complex Systems (NEJCS), vol.4, pp.1-17, 2022 (Peer-Reviewed Journal)

III. Characterizing Data Dependence Constraints for Dynamic Reliability Using n-Queens Attack Domains Wd Rozier E., Y Rozier K., Bayram U.

Leibniz Transactions on Embedded Systems, vol.4, no.1, pp.5-26, 2017 (Peer-Reviewed Journal)

# **Books & Book Chapters**

I. Ch. 5: Applying Machine Learning to Online Data? Beware! Computational Social Science Requires Care.

Bayram U.

in: Opportunities and Challenges for Computational Social Science Methods, Enes Abanoz, Editor, IGI Global, Pennsylvania, pp.100-125, 2022

# Refereed Congress / Symposium Publications in Proceedings

I. Predicting ICU death and readmission risks using publicly available data

Bayram U., Roy R.

 $Biomedical\ Engineering\ Society\ 2023\ Annual\ Meeting,\ Oregon,\ United\ States\ Of\ America,\ 13\ October\ 2023,\ pp.1$ 

II. Emotionally-Informed Models for Detecting Moments of Change and Suicide Risk Levels in Longitudinal Social Media Data

Bayram U., Benhiba L.

North American Chapter of the Association for Computational Linguistics (NAACL) Proceedings of the Eighth Workshop on Computational Linguistics and Clinical Psychology , Washington, United States Of America, 10 - 15 July 2022, pp.219-225

III. Analyzing the Effects of the COVID-19 on News Articles with Natural Language Processing Bayram U., Taraktaş B.

ULUSLARARASI KÜRESAN MULTİDİSİPLİNER ÇALIŞMALAR KONGRESİ 2021, Ankara, Turkey, 30 - 31 October 2021, pp.81-89

IV. Determining a Person's Suicide Risk by Voting on the Short-Term History of Tweets for the CLPsych 2021 Shared Task

Bayram U., Benhiba L.

CLPsych | NAACL, Mexico City, Mexico, 06 June 2021, pp.81-86

V. What's in a Word? Detecting Partisan Affiliation from Word Use in Congressional Speeches Bayram U., Pestian J., Santel D., Minai A. A.

2019 International Joint Conference on Neural Networks, IJCNN 2019, Budapest, Hungary, 14 - 19 July 2019

VI. A lexical network approach for identifying suicidal ideation in clinical interview transcripts Bayram U., A. Minai A., Pestian J.

International Conference on Complex Systems, Massachusetts, United States Of America, 22 July 2018, pp.165-172

VII. Improving Reliability with Dynamic Syndrome Allocation in Intelligent Software Defined Data Centers

Bayram U., Rozier E. W. D., Divine D., Zhou P.

45th Annual IEEE/IFIP International Conference on Dependable Systems and Networks, Rio de Janeiro, Brazil, 22 - 25 June 2015, pp.219-230

VIII. Characterizing Data Dependence Constraints for Dynamic Reliability Using N-Queens Attack Domains Bayram U., Rozier K. Y., Rozier E. W. D.

12th International Conference on Quantitative Evaluation of Systems (QEST), Madrid, Spain, 1 - 03 September 2015, vol.9259, pp.211-227

IX. Comparison of Cuboid and Tracklet Features for Action Recognition on Surveillance Videos Bayram U., Ulusoy İ., Cicekli N. K.

21st Signal Processing and Communications Applications Conference (SIU), CYPRUS, 24 - 26 April 2013

X. A FRAMEWORK FOR DETECTING COMPLEX EVENTS IN SURVEILLANCE VIDEOS

Onal I., Kardas K., Rezaeitabar Y., Bayram U., Bal M., Ulusoy İ., Cicekli N. K.

IEEE International Conference on Multimedia and Expo Workshops (ICMEW), San-Jose, Costa Rica, 15 - 19 July 2013

## XI. Unsupervised land use - land cover classification for multispectral images

Bayram U., Can G., Yüksel B., Düzgün Ş., Yalabık N.

2011 IEEE 19th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 20 - 22 April 2011, pp.574-577

### XII. Evaluation of Textural Features for Multispectral Images

Bayram U., Can G., Duzgun S., Yalabik N.

Conference on Image and Signal Processing for Remote Sensing XVII, Prague, Czech Republic, 19 - 21 September 2011, vol.8180

# XIII. Braille alfabesi ile yazılmış kabartma yazının bilgisayar ortamına aktarılarak okunabilir metin haline getirilmesi

Bayram U., Bayram U.

XII. Akademik Bilişim Konferansı, Muğla, Turkey, 10 - 12 February 2010, pp.505-508

## **Supported Projects**

Bayram U., Yeğnidemir E., TUBITAK Project, Türkiye'de Yapay Zeka Tabanlı Uzun Süreli Meteoroloji Tahmini: Bir Küresel İklim Değişimi Modellemesi, 2023 - 2024

Bayram U., Dzafic A., TUBITAK Project, SHIELD: Bir "Kadına Şiddete Karşı Dur" Yapay Zeka Modeli, 2023 - 2024 Bayram U., Sarı S., TUBITAK Project, Gerçekler Arasında Gizlenenlerin Peşinde: Yapay Zeka ile Türkçe Sosyal Medya Verilerinde Komplo Teorilerinin Tespiti, 2023 - 2024

Bayram U., Roy R., Project Supported by Higher Education Institutions, 2021 - 2022

## Memberships / Tasks in Scientific Organizations

WiDS (Women in Data Science), Country Representative, 2023 - Continues, United States Of America

## Scientific Refereeing

TUBITAK Project, 1001 - Program for Supporting Scientific and Technological Research Projects, Canakkale Onsekiz Mart University, Turkey, June 2023

SCIENTIFIC REPORTS, SCI Journal, July 2022

PITUITARY, SCI Journal, May 2022

IGI Global, Chapter Scientific / Professional Book Published by Other Publishers, July 2021

Heliyon, Journal Indexed in ESCI, July 2021

IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS, Journal Indexed in SCI-E, February 2021

IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS, Journal Indexed in SCI-E, January 2021 Heliyon, Journal Indexed in ESCI, May 2020

IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS, Journal Indexed in SCI-E, April 2019 Biomedical Informatics Insights, Other journals, October 2018

#### **Metrics**

Publication: 20 Citation (WoS): 21 Citation (Scopus): 64 H-Index (WoS): 3 H-Index (Scopus): 5

## **Congress and Symposium Activities**

Embodied Intelligence 2023 (EI'23), Attendee, Cambridge, England, 2023

International Conference on Machine Learning, Attendee, Montreal, Canada, 2022

The Annual Meeting of the North American Chapter of the Association for Computational Linguistics (NAACL), Attendee, Washington, United States Of America, 2022

The Fifth Northeast Regional Conference on Complex Systems, Attendee, New York, United States Of America, 2022 NAACL 2021 Annual Conference of the North American Chapter of Computational Linguistics, Attendee, Mexico City, Mexico, 2021

# **Scholarships**

Top 100 scholarship, Other Government Agencies, 2005 - 2009 Full scholarship, University, 2005 - 2009

#### **Awards**

Bayram U., Sarı S., Datathon2023 First Place, Btk Akademi, Google, Girişimcilik Vakfı, September 2023 Bayram U., Ruiz M., Taraktaş B., Dennehy T., Sajjadi S., Shadmangohar M., Best Project Award 2nd Place, Net-Covid Workshop, University Of Maryland, May 2020

# Non Academic Experience

Business Establishment Private, Corporate Employment Hospital, Cincinnati Children's Hospital Medical Center Business Establishment Private, Corporate Employment