



İlknur Karadeniz

ASSISTANT PROFESSOR / ASSOCIATED RESEARCHER

Istanbul, Turkey / Cambridge, UK

✉ ilknur.karadeniz@isikun.edu.tr | ✉ zi218@cam.ac.uk

🏠 www.ilknurkaradeniz.net | in ilknur-karadeniz-erol-02176b74

Professional Experience

Current Position

University of Cambridge, Theoretical and Applied Linguistics (TAL)

CAMBRIDGE, UK

Visiting Scholar

Nov. 2022 - PRESENT (1 year)

Işık University, Department of Computer Engineering

ISTANBUL, TURKEY

Assistant Professor

Feb. 2019 - PRESENT

Education

Boğaziçi University

ONTOLOGY BASED ENTITY TAGGING AND NORMALIZATION IN THE BIOMEDICAL DOMAIN

Advisor: Assoc. Prof. Arzuhan Özgür

PhD. in Computer Engineering

GPA: 3.65/4.0

DoG: January 2019

Istanbul Technical University

MORPHOLOGICAL DISAMBIGUATION IN TURKISH

Advisor: Prof. Eşref Adalı

MS. in Computer Engineering

GPA: 3.56/4.0

DoG: June 2007

Yeditepe University

TEG-NALAN: TEMPLATE GENERATOR USING NATURAL LANGUAGE

Advisor: Asst. Prof. Ender Özcan

BS. in Computer Engineering

GPA: 3.78/4.0

DoG: June 2004

Work Experience

Boğaziçi University

DEPARTMENT OF COMPUTER ENGINEERING

Full time

Research Assistant

Sep 2012 - Feb. 2019

NETAŞ

TELECOMMUNICATION INDUSTRY

Full time

Software Engineer

Feb. 2009 - Sep. 2010

Istanbul Technical University

DEPARTMENT OF COMPUTER ENGINEERING

Full time

Teaching Assistant

Sep. 2004 - Feb. 2009

Yeditepe University

DEPARTMENT OF COMPUTER ENGINEERING

Part time

Student Assistant

Sep. 2003 - Feb. 2004

Honors and Awards

Center for Researcher and Academician Development in Information and Telecommunications Technologies PhD. Scholar

AWARDED BY BOĞAZIÇI UNIVERSITY

PhD Scholarship

2016 - 2019

B.S. Scholarship

AWARDED BY YEDITEPE UNIVERSITY

100% YÖK Scholarship

1999 - 2004

Graduated as High Honor Student

AWARDED BY YEDITEPE UNIVERSITY

B.S.

2004

Research Experience

Research Interests

Natural Language Processing, Bioinformatics, Machine Learning, Text mining

Research Grants/Projects

2535 TÜBİTAK - MSRT Turkey - Iran Bilateral Cooperation Program

DEEP TRANSFER LEARNING BASED PREDICTION OF PATHOGEN-HOST PROTEIN-PROTEIN INTERACTIONS

Principal Investigator

Oct. 2020 - Jan. 2022

European Commission, FP7 Marie Curie Career Integration Grant

CONTEXTUAL TEXT MINING FROM THE BIOMEDICAL SCIENTIFIC LITERATURE

Principal Investigator: Assoc. Prof. Arzucan Özgür

Researcher

Sep. 2012 - Nov. 2015

PHITech

PHISTO (PATHOGEN-HOST INTERACTION SEARCH TOOL)

Research Engineer

Sep. 2013 - Sep. 2014

Professional Activities

Expert Systems With Applications

REVIEWER

2022

Turkish Journal of Electrical Engineering and Computer Sciences

REVIEWER

2020

SIU - Signal Processing and Communications Applications

REVIEWER

2020, 2021, 2022

Refereed International Journal Articles

- Graph convolutional network based virus-human protein-protein interaction prediction for novel viruses** *Journal of Computational Biology and Chemistry*
 KOCA, M.B, NOURANI E., ABBASOĞLU F., [KARADENİZ, İ.](#), SEVILGEN, F.E. 2022
 Volume 101.
- Linking Entities through an Ontology using Word Embeddings and Syntactic Re-ranking** *BMC bioinformatics*
[KARADENİZ, İ.](#) AND ÖZGÜR, A. 2019
 20(1), p.156.
- Detection and categorization of bacteria habitats using shallow linguistic analysis** *BMC bioinformatics*
[KARADENİZ, İ.](#) AND ÖZGÜR, A. 2015
 16.10: S5.
- Literature Mining and Ontology based Analysis of Host-Brucella Gene-Gene Interaction Network** *Frontiers in microbiology*
[KARADENİZ, İ.](#), HUR, J., HE, Y., AND ÖZGÜR, A. 2015
 6.
- PHISTO: Pathogen-Host Interaction Search Tool** *Bioinformatics*
 DURMUŞ TEKİR, S., ÇAKIR T., ARDIÇ E., SAYILIRBAŞ A.S., KONUK G., KONUK M., SARIYER H., UĞURLU A., [KARADENİZ, İ.](#), ÖZGÜR A., SEVILGEN FE. 2013
 29(10), 1357-1358.

Refereed International Conference and Workshop Papers

- Linguistically informed Machine learning Approach for Causality Identification in Financial Documents.** *COLING 2020, (online)*
 ÖZENİR, G. AND [KARADENİZ, İ.](#), IN PROCEEDINGS OF THE 1ST JOINT WORKSHOP ON FINANCIAL NARRATIVE PROCESSING AND MULTILING FINANCIAL SUMMARISATION 2020
 pp. 85-89.
- BOUN ISIK Participation An unsupervised Approach for the Named Entity Normalization and Relation Extraction of Bacteria Biotopes.** *EMNLP 2019, Hong Kong*
[KARADENİZ, İ.](#), TUNA, Ö.F. AND ÖZGÜR, A., IN PROCEEDINGS OF THE 5TH WORKSHOP ON BIONLP OPEN SHARED TASKS 2019
 pp. 150-157.
- Bacteria Biotope Detection, Ontology based Normalization, and Relation Extraction using Syntactic Rules** *ACL 2013, Sofia*
[KARADENİZ, İ.](#) AND ÖZGÜR, A., IN PROCEEDINGS OF THE BIONLP SHARED TASK 2013 WORKSHOP 2013
- PHISTO A New Web Platform for Pathogen Human Interactions** *Computational Methods in Systems Biology*
 DURMUŞ TEKİR S., ÇAKIR T., ARDIÇ E., [KARADENİZ, İ.](#), ÖZGÜR A., SEVILGEN F.E., ÜLGEN, K. 2013
 pp. 268.
- Generating Java Class Skeleton Using a Natural Language Interface** *NLUCS, Portugal*
 OZCAN, E., SEKER, S.E. AND [KARADENİZ, Z.İ.](#) 2004
 pp. 126-134.

Refereed National Conferences

Protein Interaction Prediction on PHI Networks Using Graph Convolution Networks

SIU 2021, (online)

KOCA, M.B., [KARADENIZ, İ.](#), NOURANI, E. AND SEVILGEN, F.E., IN 2021 29TH SIGNAL PROCESSING AND COMMUNICATIONS

APPLICATIONS CONFERENCE (SIU)

2021

(pp. 1-4), IEEE

Others

Istanbul Technical University - Faculty of Computer and Informatics

Istanbul, Turkey

TRANSFORMING DATA IN THE BIOMEDICAL DOMAIN INTO BIOLOGICALLY IMPORTANT INFORMATION

2022

SEMINAR

ECCB 2018 - 17th European Conference on Computational Biology

Athens, Greece

LINKING ENTITIES THROUGH AN ONTOLOGY USING WORD EMBEDDINGS AND SYNTACTIC RE-RANKING

2018

POSTER

Işık University - Faculty of Engineering

Istanbul, Turkey

ONTOLOGY-BASED ENTITY TAGGING AND NORMALIZATION IN THE BIOMEDICAL DOMAIN

2018

SEMINAR

HIBIT 2018 - International Symposium on Health Informatics and Bioinformatics

Antalya, Turkey

ONTOLOGY-BASED NAMED ENTITY NORMALIZATION USING WORD EMBEDDINGS

2018

POSTER

Teaching Experience

Teaching Interests

**Fundamentals of Programming, Object Oriented Programming, Information Retrieval,
Graduate courses related to the research direction**

Graduate Courses

CSE 561 - Advanced Natural Language Processing

Işık University

INSTRUCTOR

Fall 2019

CSE 586 - Information Retrieval

Işık University

INSTRUCTOR

Spring 2019, Spring 2020, Spring 2021,

Spring 2022

CMPE 561 - Natural Language Processing

Boğaziçi University

RESEARCH ASSISTANT

Fall 2013

Undergraduate Courses

COMP 1112 - Object Oriented Programming

Işık University

INSTRUCTOR

Spring 2019, Spring 2020, Summer 2020,

Spring 2021

COMP 4602 - Natural Language Processing

INSTRUCTOR

Işık University

Fall 2021

COMP 1111 - Fundamentals of Programming

INSTRUCTOR

Işık University

Fall 2020, Spring 2021, Fall 2021, Spring

2022

COMP 1101 - Introduction to Programming

INSTRUCTOR

Işık University

Spring 2019, Fall 2019

COMP 3401 - Computer Organization

INSTRUCTOR

Işık University

Fall 2019, Fall 2021

ENG 101 - Introduction to Computers

INSTRUCTOR

Boğaziçi University

Fall 2018

Microprocessors, Advanced Data Structures

TEACHING ASSISTANT

Istanbul Technical University

2005 - 2009

M.S. Students

Financial Text Mining

GOING ON SINCE 2022

Imran Topuz

Bahçeşehir University

Advisor

Supervised Senior Projects

Capella: An Android Application as a Life Assistant

SPRING 2022

Büşra Tekin

Işık University

Advisor

NoteOfTheEverything

SPRING 2021

Anzel Öztürk and Seray Şimşek

Işık University

Advisor

PsiCloud: A Follow-up and Appointment Web Application for Psychologists

SPRING 2021

Muhammed Emin Özer and Berke Adalı

Işık University

Advisor

An android based teaching platform

FALL 2021

Irfan Ege Saray

Işık University

Advisor

A web-based tool for Covid-19 Host Protein-Protein Interaction Prediction

FALL 2020

Berkay Yılmaz

Işık University

Advisor

Preprocessing Tool for Covid-19 Host Protein-Protein Interaction Prediction

FALL 2020

Gözde Gökyokuş

Işık University

Advisor

Others

Natural Languages

Turkish (Native), English (Professional), Italian (Beginner)