



# Boğaziçi Üniversitesi



## Teleiletişim ve Enformatik Teknolojileri Uygulama ve Araştırma Merkezi (TETAM)

### Doktora Öğrencileri Seminerleri

30.04.2021 / 10:00-11:30 Yer: Zoom Webinar

**Title:** Semantic Analysis by Using Different Tokenizations and Embedding Techniques

**Ali Erkan**

**Abstract:** From different tokenizations such as unigram, Byte Pair Encoding (BPE), stem and morphemes; embedding vectors are produced by using Word2vec, Glove and Bert. We analyzed and compared semantic analysis performances of these tokenizations and embeddings by using Convolutional Neural Networks (CNN).

**Bio:** Ali Erkan is a Ph.D. candidate in Computer Engineering of Boğaziçi University. He holds M.Sc in Software Engineering from Boğaziçi University and M.Sc. and B.Sc. in Industrial Engineering from Bilkent University. His Ph.D. studies focus on the natural language processing, machine learning, sentiment analysis. He has several years of experience as a software engineer in different companies.



**Title:** Slip Distribution of the 2020 Mw6.9 Samos Earthquake

**Figen Eskiköy**

**Abstract:** On 2020 October 30, an Mw6.9 earthquake struck offshore Samos Island. Severe structural damages were observed in Greek Islands and city of Izmir (Turkey). 114 people lost their lives and more than a thousand people were injured in Turkey. The earthquake triggered local tsunami. The maximum runup was measured as ~2 m in Sigacik and Akarca in Tukey (Yalciner et. al.,2020) and Vathy Town (NE Samos Island) in Greece (Triantafyllou et. al.,2020). Significant seismic activity occurred in this region following the earthquake and ( $M>1$ ) ~1800 aftershocks were recorded by KOERI within the first three days. The surface deformation of the earthquake was obtained from both descending and ascending orbits of the Sentinel-1 A/B and ALOS2 satellites. In the slip distribution inversion process, the most powerful control was provided by GPS data. In this step of the study, we used the data from 25 continuous GPS stations and 10 GNSS campaign sites along onshore of Turkey. The aim of this study is estimating kinematic variable slip distribution by inverting geodetic data jointly with near field displacement waveforms with Bayesian based BEAT (Pyrocko) tool. The slip distribution results indicate that earthquake rupture is ~35 km long and the maximum slip is ~2 m normal slip along a north dipping fault plane. This EW trending, ~45° north dipping normal faulting system consistent with this tectonic regime in the region. This seismically active area is part of a N-S extensional regime and controlled primarily by normal fault systems.

**Bio:** Figen Eskiköy got her BSc. and minor degree from Istanbul University, Department of Geophysical Engineering in 2009 and Department of Environmental Engineering in 2010, respectively. She received her Msc degree in Department of Geophysics from Bogazici University, Kandilli Observatory and Earthquake Research Institute (KOERI), in 2014. Currently, she is a Ph.D. candidate in the same department.



**Title:** Predicting Psychological Attributes from User Generated Content

**Ahmet Emre Aladağ**

**Abstract:** Internet Users leave footprints on online platforms they use. These footprints can give us hints about their psychological attributes like mental mood, mental disorders or even personality. We aim to use text mining and machine learning techniques to predict these attributes and gain insight about the authors of online content.

**Bio:** Ahmet Emre Aladağ is a PhD candidate in Computer Engineering department of Boğaziçi University. He received his BSc from Işık University and MSc from Kadir Has University, both in Computer Engineering.

Zoom linki için [cansu.canbek@boun.edu.tr](mailto:cansu.canbek@boun.edu.tr) adresine e-posta atabilirsiniz.