Ali Mert Ertuğrul

CONTACT INFORMATION	Information Science Building University of Pittsburgh 135 North Bellefield Ave Pittsburgh, PA 15260	*Phone:* +1(412)2730009 *E-mail:* mrtertugrul@gmail.com https://mertugrul.github.io/

RESEARCH INTERESTS

Data science, machine learning, spatio-temporal modeling, event analytics

PERSONAL INFORMATION

Place and date of birth: Konya, 30/06/1988
Nationality: Turkish
Gender: Male
Languages: English (Proficient), Turkish (Native)

EDUCATION

Middle East Technical University (METU), Ankara, Turkey

Ph.D., Department of Information Systems, December 2019

M.Sc., Department of Information Systems, September 2015

B.Sc., Computer Engineering Department, June 2011

ACADEMIC AND WORK EXPERIENCE

Postdoctoral Associate — 01/2020 - current
PICSO Lab
School of Computing and Information, University of Pittsburgh

Visiting Scholar — 09/2017 - 12/2019
PICSO Lab
School of Computing and Information, University of Pittsburgh

Research and Teaching Assistant — 12/2013 - 11/2017
Department of Information Systems, Middle East Technical University

Visiting Ph.D. Student — 07/2016 - 09/2016
Web Information Systems Group, Delft University of Technology

Researcher and Analyst — 11/2014 - 12/2015
Bilgi Grubu, Ankara, Turkey

R&D Software Engineer — 10/2011 - 09/2013
Arcelik R&D METU-Technopolis, Ankara, Turkey

Intern — 07/2009 - 08/2009
TAI - Turkish Aerospace Industries, Inc., Ankara, Turkey

HONORS & AWARDS

High honor graduation, Ph.D. in Department of Information Systems, METU	**2019**
Course Performance Award, Department of Information Systems, METU	**2017**
High honor graduation, M.Sc. in Department of Information Systems, METU	**2015**
Ranked 942nd among ~2M examinees in Turkish University Entrance Examination	**2005**

PRESS

AI can predict opioid overdoses from crime and socioeconomic data, [VentureBeat]	**05/2019**
AI Offers Insights on the Opioid Crisis, [Seeflection]	**05/2019**

PROJECTS	**Linking Online Attention to Measurable Actions.**	**01/2020 - current**
	Air Force Office of Scientific Research (AFOSR)	
	TRIBAL: A Tripartite Model for Group Bias Analytics.	**07/2018 - 05/2019**
	DARPA Understanding Group Biases (UGB) Disruptioneering Program	
	Software Agility Assessment Reference Model.	**04/2014 - 04/2016**
	The Scientific and Technological Research Council of Turkey (TUBITAK) (Project no: 113E528)	

CERTIFICATES

Course Certificate of online course Neural Networks and Deep Learning by Andrew Ng.
Course Certificate of online course Machine Learning by Andrew Ng.
Course Certificate of online course Process Mining: Data science in Action by Professor dr.ir. Wil van der Aalst.
CCFL - Certified COSMIC at Foundation Level by Common Software Measurement International Consortium

COMPUTER SKILLS AND ABILITIES

Programming

Python, Java, C, C++, Haskell, Scheme

Analytics

Tensorflow, PyTorch, R, Matlab, Keras, Scikit-learn, Pajek, Weka

Web Development

JavaScript, PHP, ASP, ASP.NET, HTML, CSS, JQuery, JointJS, XML, JSON

Database

MySql, PostgreSQL, MSSql, SQL

JOURNAL PUBLICATIONS

[1] **A. M. Ertugrul**, Y.-R. Lin, W.-T. Chung, M. Yan, A. Li, Activism via attention: interpretable spatiotemporal learning to forecast protest activities, *EPJ Data Science*, 2019.

CONFERENCE PUBLICATIONS

[2] M. Yan, Y.-R. Lin, R. Hwa, **A. M. Ertugrul**, M. Guo, W.-T. Chung, MimicProp: Learning to Incorporate Lexicon Knowledge into Distributed Word Representation for Social Media Analysis, *International AAAI Conference on Web and Social Media (ICWSM)*, 2020.

[3] **A. M. Ertugrul**, Y.-R. Lin, T. Taskaya-Temizel, CASTNet: Community-Attentive Spatio-Temporal Networks for Opioid Overdose Forecasting, *European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD)*, 2019.

[4] W.-T. Chung, Y.-R. Lin, A. Li, **A. M. Ertugrul**, M. Yan, March with and without Feet: The Talking about Protests and Beyond, *10th International Conference on Social Informatics (SocInfo)*, 2018.

[5] X. Teng, M. Yan, **A. M. Ertugrul**, Y.-R. Lin, Deep into Hypersphere: Robust and Unsupervised Anomaly Discovery in Dynamic Networks, *27th International Joint Conference on Artificial Intelligence (IJCAI)*, 2018.

[6] **A. M. Ertugrul**, Y.-R. Lin, C. Mair, T. Taskaya Temizel, Forecasting Heroin Overdose Occurrences from Crime Incidents, *11th International Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS) - Opioid Challenge*, 2018.

[7] R. Napoli, **A. M. Ertugrul**, A. Bozzon, M. Brambilla, A User Modeling Pipeline for Studying Polarized Political Events in Social Media, *KDWEB Workshop 2018, co-located with ICWE 2018*, 2018.

[8] **A.M. Ertugrul**, P. Karagoz. Movie Genre Classification from Plot Summaries using Bidirectional LSTM. *IEEE International Conference on Semantic Computing (ICSC)*, 2018.

[9] **A.M. Ertugrul**, B. Velioglu, P. Karagoz. Word Embedding based Event Detection on Social Media. *12th International Conference on Hybrid Artificial Intelligence Conference (HAIS)*, 2017.

[10] **A.M. Ertugrul**, I. Onal, C. Acarturk. Does the Strength of Sentiment Matter? A Regression based Approach on Turkish Social Media, *22nd International Conference on Natural Language & Information Systems (NLDB)*, 2017.

[11] **A.M. Ertugrul**, O. Demirors. A Method for Modeling Business Processes in a Role-based and Decentralized Way, *8th International Conference on Subject-Oriented Business Process Management (S-BPM)*, 2016.

[12] **A.M. Ertugrul**, O. Demirors. An exploratory study on role-based collaborative business process modeling approaches, *7th International Conference on Subject-Oriented Business Process Management (S-BPM)*, 2015.

[13] **A.M. Ertugrul**, G. Yilmaz, M. Salmanoglu, O. Demirors. The Effect of Highlighting Error Categories in FSM Training on the Accuracy of Measurement, *Joint Conference of International Workshop on Software Measurement and the International Conference on Software Process and Product Measurement (IWSM-MENSURA)*, 2014.

[14] **A.M. Ertugrul**, I. Onal. RemindMe: An Enhanced Mobile Location-Based Reminder Application, *2nd International Conference on Future Internet of Things and Cloud (Fi-Cloud)*, 2014.

[15] I. Onal, **A.M. Ertugrul**, R. Cakici. Effect of Using Regression on Class Confidence Scores in Sentiment Analysis of Twitter Data, *5th ACL Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA)*, 2014.

NATIONAL CONFERENCE PUBLICATIONS

[16] I. Onal, **A.M. Ertugrul**. Effect of using regression in sentiment analysis. *22nd Signal Processing and Communications Applications Conference (SIU)*, 2014. (in Turkish).

[17] O.R. Yurum, O.O. Top, **A.M. Ertugrul**, O. Demirors. Yazılım Süreç Değerlendirme Araçlarının Karşılaştırılması: Bir Çoklu Durum Çalışması. *8th National Software Engineering Symposium (UYMS)*, 2014. (in Turkish).

[18] **A.M. Ertugrul**, I. Onal. Çeşitli Konum Etiketleme Opsiyonlarıyla Zenginlestirilmiş Yeni Bir Konum Bazlı Hatırlatma Uygulaması, *8th National Software Engineering Symposium (UYMS)*, 2014. (in Turkish).

THESES

[19] **A.M. Ertugrul**. Interpretable Spatio-Temporal Networks for Modeling and Forecasting Societal Events. *Ph.D. Thesis, Department of Information Systems, Middle East Technical University*, 2019.

[20] **A.M. Ertugrul**. ROADMAP: A Novel Method for Role-based and Decentralized Process Modeling. *M.Sc. Thesis, Department of Information Systems, Middle East Technical University*, 2015.