Ali Mert Ertuğrul

Information Science Building Phone: +1(412)2730009 CONTACT University of Pittsburgh *E-mail:* mrtertugrul@gmail.com INFORMATION 135 North Bellefield Ave http://users.metu.edu.tr/e150236/ Pittsburgh, PA 15260 RESEARCH Data science, machine learning, spatio-temporal modeling, event analytics **INTERESTS** Place and date of birth: Konya, 30/06/1988 PERSONAL Nationality: Turkish INFORMATION Gender: Male Languages: English (Proficient), Turkish (Native) Middle East Technical University (METU), Ankara, Turkey **EDUCATION** Ph.D., Department of Information Systems, December 2019 M.Sc., Department of Information Systems, September 2015 B.Sc., Computer Engineering Department, June 2011 ACADEMIC **Postdoctoral Associate** 01/2020 - current AND WORK PICSO Lab EXPERIENCE School of Computing and Information, University of Pittsburgh **Visiting Scholar** 09/2017 - 12/2019 PICSO Lab School of Computing and Information, University of Pittsburgh 12/2013 - 11/2017 **Research and Teaching Assistant** 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 07/2009 - 08/2009 Intern TAI - Turkish Aerospace Industries, Inc., Ankara, Turkey Honors & High honor graduation, Ph.D. in Department of Information Systems, METU 2019 Course Performance Award, Department of Information Systems, METU 2017 **AWARDS** High honor graduation, M.Sc. in Department of Information Systems, METU 2015 Ranked 942nd among ~2M examinees in Turkish University Entrance Examination 2005 AI can predict opioid overdoses from crime and socioeconomic data, [VentureBeat] **PRESS** 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, colocated 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.