

## Asst. Prof. YILMAZ AR

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAF-8395-2020

ScopusID: 35730956900

Yoksis Researcher ID: 170252

### Education Information

Doctorate, Middle East Technical University, Graduate School Of Informatics, Information Systems, Turkey 2007 - 2014

Postgraduate, Syracuse University, United States Of America 1999 - 2001

Undergraduate, Bursa Uludağ University, Mühendislik Fakültesi, Endüstri Mühendisliği Bölümü, Turkey 1993 - 1997

### Dissertations

Doctorate, Improved probabilistic matrix factorization model for sparse datasets, Middle East Technical University, Graduate School Of Informatics, Information Systems, 2014

### Research Areas

Engineering and Technology

### Academic Titles / Tasks

Assistant Professor, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2020 - Continues

Research Assistant, Ankara University, Mühendislik Fakültesi, Bilgisayar Mühendisliği Bölümü, 2004 - 2020

### Academic and Administrative Experience

Vice Dean, Ankara University, Mühendislik Fakültesi, 2022 - Continues

### Advising Theses

AR Y., Uygulama programlama arayüzü (UPA) çağrılarının kullanılmasına dayalı makine öğrenmesi yöntemleriyle zararlı yazılım tespiti, Postgraduate, A.KUTAY(Student), 2021

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

- I. **Deep Learning-Based Classification of Image Data Sets Containing 111 Different Seeds**  
Tuğrul B., Eryiğit R., Ar Y.  
Advanced Theory and Simulations, vol.6, no.11, 2023 (SCI-Expanded)
- II. **A Machine Learning Approach to Malware Detection Using Application Programming Interface Calls (MDAPI)**  
Yuksel A. K., Ar Y.  
Traitement du Signal, vol.40, no.4, pp.1511-1520, 2023 (SCI-Expanded)
- III. **Pros and Cons of Telemedicine for Inherited Metabolic Disorders in a Developing Country During the COVID-19 Pandemic**  
Yekeduez M., DOĞULU N., SÜRÜCÜ KARA İ., Oncul U., BAKIRARAR B., KÜLLÜ P., AR Y., KÖSE E., EMİNOĞLU F. T.  
TELEMEDICINE AND E-HEALTH, vol.28, no.11, pp.1604-1612, 2022 (SCI-Expanded)
- IV. **A NEW CURVE FITTING BASED RATING PREDICTION ALGORITHM FOR RECOMMENDER SYSTEMS**  
Ar Y., Amrahov Ş., Gasilov N., Yiğit Sert S.  
KYBERNETIKA, vol.58, no.3, pp.440-455, 2022 (SCI-Expanded)
- V. **Mapping application-specific topology to mesh topology with reconfigurable switches**  
KÜLLÜ P., AR Y., TOSUN S., Ozdemir S.  
IET COMPUTERS AND DIGITAL TECHNIQUES, vol.14, no.1, pp.9-16, 2020 (SCI-Expanded)
- VI. **Evolutionary approaches for weight optimization in collaborative filtering-based recommender systems**  
YİĞİT SERT S., AR Y., BOSTANCI G. E.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.27, no.3, pp.2121-2136, 2019 (SCI-Expanded)
- VII. **A genetic algorithm solution to the collaborative filtering problem**  
AR Y., BOSTANCI G. E.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.61, pp.122-128, 2016 (SCI-Expanded)
- VIII. **Application-specific topology generation algorithms for network-on-chip design**  
Tosun S., Ar Y., Ozdemir S.  
IET COMPUTERS AND DIGITAL TECHNIQUES, vol.6, no.5, pp.318-333, 2012 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Classification of human activities by smart device measurements**  
KALKAN M., AR Y.  
Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.65, no.2, pp.166-178, 2023 (Peer-Reviewed Journal)
- II. **Prediction of software quality with Machine Learning-Based ensemble methods**  
CERAN A. A., AR Y., TANRIÖVER Ö. Ö., Seyrek Ceran S.  
Materials Today: Proceedings, vol.81, pp.18-25, 2023 (Scopus)
- III. **A method for analyzing suspect-filler similarity using convolutional neural networks**  
AYDIN D. E., AR Y.  
Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.64, no.2, pp.129-151, 2022 (Peer-Reviewed Journal)
- IV. **Emotion Recognition System from Speech using Convolutional Neural Networks**  
AYDIN M., TUĞRUL B., AR Y.  
Journal of Computer Science, 2022 (Peer-Reviewed Journal)
- V. **An initialization method for the latent vectors in probabilistic matrix factorization for sparse datasets**  
AR Y.

EVOLUTIONARY INTELLIGENCE, vol.13, no.2, pp.269-281, 2020 (ESCI)

- VI. **An Ensemble Model for Collaborative Filtering to Involve All Aspects of Dataset**  
AR Y.  
Communications Faculty of Sciences University of Ankara Series A2-A3: Physical Sciences and Engineering, vol.60, no.2, pp.15-26, 2018 (Peer-Reviewed Journal)
- VII. **A Thread Building Blocks Based Parallel Genetic Algorithm**  
BOSTANCI G. E., AR Y., YIĞİT SERT S.  
International Journal of Research and Reviews in Applied Sciences, vol.31, no.1, pp.1-8, 2017 (Peer-Reviewed Journal)
- VIII. **Transitive Associations for Domain Transfer Problem on Opinion Mining**  
AR Y.  
International Journal of Advances in Computer Science and Its Applications, vol.6, no.1, pp.232-238, 2016 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **BİR C++ PROGRAMININ YAZILMASI, DERLENMESİ VE ÇALIŞTIRILMASI**  
AR Y.  
in: Programlama Temelleri, , Editor, ATATÜRK ÜNİVERSİTESİ AÇIKÖĞRETİM FAKÜLTESİ YAYINEVİ, pp.65-82, 2019
- II. **İLK C++ PROGRAMI (MERHABA DÜNYA)**  
AR Y.  
in: Programlama Temelleri, , Editor, ATATÜRK ÜNİVERSİTESİ AÇIKÖĞRETİM FAKÜLTESİ YAYINEVİ, pp.47-64, 2019

## Refereed Congress / Symposium Publications in Proceedings

- I. **An Artificial Bee Colony Based Mapping Method for Three Dimensional Network-on-Chip**  
KÜLLÜ P., YIĞİT SERT S., ÖZKAN OKAY M., AR Y.  
2023 International Conference on Emerging Trends in Networks and Computer Communications (ETNCC), NAMÍBÍA, 16 - 18 August 2023
- II. **A NEW DATASET FOR INTRUSION DETECTION IN WIRELESS LOCAL AREA NETWORK**  
ÖZKAN OKAY M., AR Y., SAMET R.  
The 8th International Conference on Control and Optimization with Industrial Applications, Azerbaijan, 24 August 2022
- III. **Prediction of Software Quality with Machine Learning-Based Ensemble Methods**  
CERAN A. A., AR Y., TANRIÖVER Ö. Ö., SEYREK CERAN S.  
4th International Engineering Research Symposium, Turkey, 4 - 06 March 2022
- IV. **Automobile Price Prediction in Turkey Marketplace with Linear Regression**  
Satioglu M. C., AR Y., TUĞRUL B.  
International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Bolu, Turkey, 21 October 2021
- V. **Evolutionary Fuzzy Adaptive Motion Models for User Tracking in Augmented Reality Applications**  
AR Y., ÜNAL M., Sert S. Y., BOSTANCI G. E., Kanwal N., GÜZEL M. S.  
2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2018, Kizilcahamam, Ankara, Turkey, 19 - 21 October 2018
- VI. **Evolutionary Fuzzy Adaptive Motion Models for User Tracking in Augmented Reality Applications**  
AR Y., ÜNAL M., YIĞİT S., BOSTANCI G. E., Kanwal N., GÜZEL M. S.  
2nd International Symposium on Multidisciplinary Studies and Innovative Technologies, ISMSIT 2018, Kizilcahamam, Ankara, Turkey, 19 - 21 October 2018
- VII. **The Impact of Dataset Characteristics on Collaborative Filtering**

AR Y., ÖZDEMİR O. C.

International Conference on Theoretical and Applied Computer Science and Engineering, Turkey, 10 - 11 November 2017

**VIII. Development of Recommender Systems Based on the Curve Fitting Method**

EMRAH Ş., AR Y., GASİLOV N., FATULLAYEV A. G.

International Conference on Mathematics and Mathematics Education, Turkey, 12 - 14 May 2016

**IX. Transitive Associations for Domain Transfer Problem on Opinion Mining**

AR Y.

Third International Conference on Advances in Information Processing and Communication Technology - IPCT 2015, ROMA, Italy, 10 - 11 December 2015

**X. Power-aware topology generation for application specific NoC design**

Tosun S., AR Y., Ozdemir S.

2012 6th International Conference on Application of Information and Communication Technologies, AICT 2012, Tbilisi, Georgia, 17 - 19 October 2012

**XI. TopGen: A new algorithm for automatic topology generation for network on chip architectures to reduce power consumption**

AR Y., Tosun S., Kaplan H.

2009 International Conference on Application of Information and Communication Technologies, AICT 2009, Baku, Azerbaijan, 14 - 16 October 2009

## Supported Projects

Ar Y., Ünal M., Yiğit Sert S., Bostancı G. E., Project Supported by Higher Education Institutions, Artırılmış Gerçeklik Uygulamalarında GPS-INS Tabanlı Kullanıcı Takibi için Akıllı Hareket Modeli Seçim Yöntemi Geliştirilmesi, 2016 - 2018

## Metrics

Publication: 30

Citation (WoS): 94

Citation (Scopus): 128

H-Index (WoS): 3

H-Index (Scopus): 3