

## **Assoc. Prof. MURAT AYDOS**

### **Personal Information**

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**Address:** Hacettepe Üniversitesi, Bilişim Enstitüsü, Beytepe Kampüsü, Beytepe, Ankara

### **International Researcher IDs**

ORCID: 0000-0002-7570-9204

Publons / Web Of Science ResearcherID: J-1483-2013

ScopusID: 56928400400

Yoksis Researcher ID: 160043

### **Education Information**

Doctorate, Oregon State University, Engineering Faculty, Electrical & Computer Engineering Department, United States Of America 1996 - 2001

Postgraduate, Oklahoma State University, Engineering Faculty, Electrical & Computer Engineering Department, United States Of America 1994 - 1996

Undergraduate, Yildiz Technical University, Mühendislik Fakültesi, Elektronik Ve Haberleşme Mühendisliği, Turkey 1987 - 1991

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Efficient Wireless Security Protocols based on Elliptic Curve Cryptography, Oregon State University, Electrical Computer Engineering Department, 2001

### **Research Areas**

Computer Sciences, Information Security and Reliability, Information System Reliability, Hardware Security, Cryptography, Software Security, Computer Networks, Communications and Network Protocols, Engineering and Technology

### **Academic Titles / Tasks**

Associate Professor, Hacettepe University, Bilişim Enstitüsü, Bilgi Güvenliği A.B.D., 2021 - Continues

Assistant Professor, Hacettepe University, Bilişim Enstitüsü, 2018 - 2021

Assistant Professor, Hacettepe University, Bilişim Enstitüsü, 2013 - 2018

## **Academic and Administrative Experience**

Hacettepe Üniversitesi, Bilişim Enstitüsü, Bilgi Güvenliği Anabilim Dalı, 2013 - Continues

## **Advising Theses**

AYDOS M., Kurumsal kampüs ağlarında otomatik sanal yerel alan ağ tasarımları ve servis kalitesi analizleri, Postgraduate, M.ÇETİN(Student), 2006

AYDOS M., Kampus ağlarında sistem performansının optimizasyonu, Postgraduate, S.ALTAN(Student), 2005

AYDOS M., Uzaktan erişimli kriptografik güvenli haberleşme protokolü, Postgraduate, A.UĞUR(Student), 2005

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

- I. **GramBeddings: A New Neural Network for URL Based Identification of Phishing Web Pages Through N-gram Embeddings**  
BOZKIR A. S., Dalgic F. C., AYDOS M.  
Computers and Security, vol.124, 2023 (SCI-Expanded)
- II. **ERP failure: A systematic mapping of the literature**  
Coskun E., GEZİCİ B., AYDOS M., KOLUKISA TARHAN A., Garousi V.  
DATA & KNOWLEDGE ENGINEERING, vol.142, 2022 (SCI-Expanded)
- III. **Security testing of web applications: A systematic mapping of the literature**  
AYDOS M., Aldan C., Coskun E., Soydan A.  
JOURNAL OF KING SAUD UNIVERSITY-COMPUTER AND INFORMATION SCIENCES, vol.34, no.9, pp.6775-6792, 2022  
(SCI-Expanded)
- IV. **The rise of ransomware: Forensic analysis for windows based ransomware attacks**  
Kara I., AYDOS M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.190, 2022 (SCI-Expanded)
- V. **Catch them alive: A malware detection approach through memory forensics, manifold learning and computer vision**  
BOZKIR A. S., Tahillioglu E., AYDOS M., Kara I.  
COMPUTERS & SECURITY, vol.103, 2021 (SCI-Expanded)
- VI. **LogoSENSE: A companion HOG based logo detection scheme for phishing web page and E-mail brand recognition**  
BOZKIR A. S., AYDOS M.  
COMPUTERS & SECURITY, vol.95, 2020 (SCI-Expanded)
- VII. **Assessing risks and threats with layered approach to Internet of Things security**  
AYDOS M., Vural Y., TEKEREK A.  
MEASUREMENT & CONTROL, vol.52, pp.338-353, 2019 (SCI-Expanded)
- VIII. **Laboratory data quality control: A new cost-effective approach**  
AYDOS M., Nalbant A., Vural Y.  
MEASUREMENT & CONTROL, vol.51, pp.160-171, 2018 (SCI-Expanded)
- IX. **rho-Gain: a utility based data publishing model**  
Vural Y., AYDOS M.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.33, no.4, pp.1355-1368, 2018 (SCI-Expanded)

## **Articles Published in Other Journals**

- I. **THE GHOST IN THE SYSTEM: TECHNICAL ANALYSIS OF REMOTE ACCESS TROJAN**  
Kara I., AYDOS M.

- INTERNATIONAL JOURNAL ON INFORMATION TECHNOLOGIES AND SECURITY, vol.11, no.1, pp.73-84, 2019 (ESCI)
- II. CHAOTIC IMAGE ENCRYPTION WITH RANDOM SHUFFLING OF DATA  
AYDOS M., UĞUR A.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSITESI MUHENDISLIK  
BİLİMLERİ DERGİSİ, vol.20, no.2, pp.31-35, 2014 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

- I. Wireless Intrusion Detection Using Shallow Neural Network Models  
Ozturk S. B., AYDOS M.  
2023 IEEE International Black Sea Conference on Communications and Networking, BlackSeaCom 2023, İstanbul, Turkey, 4 - 07 July 2023, pp.39-44
- II. Software Implementation Performances of Block Ciphers: A Systematic Literature Review  
Zorba B. B., ALKAR A. Z., AYDOS M., Kolukisa-Tarhan A.  
7th International Workshop on Big Data and Information Security, IWbis 2022, Depok, Indonesia, 1 - 03 October 2022, pp.65-74
- III. Utilization and comparision of convolutional neural networks in malware recognition Kötüçül Yazılımların Tanınmasında Evrişimsel Sinir Ağlarının Kullanımı ve Karşılaştırılması  
BOZKIR A. S., Cankaya A. O., AYDOS M.  
27th Signal Processing and Communications Applications Conference, SIU 2019, Sivas, Turkey, 24 - 26 April 2019
- IV. Utilization and Comparision of Convolutional Neural Networks in Malware Recognition  
BOZKIR A. S., Cankaya A. O., AYDOS M.  
27th Signal Processing and Communications Applications Conference (SIU), Sivas, Turkey, 24 - 26 April 2019
- V. Spam/Ham E-Mail Classification using Machine Learning Methods based on Bag of Words Technique  
Sahin E., AYDOS M., Orhan F.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- VI. Static and Dynamic Analysis of Third Generation Cerber Ransomware  
Kara I., AYDOS M.  
International Congress on Big Data, Deep Learning and Fighting Cyber Terrorism (IBIGDELT), Ankara, Turkey, 3 - 04 December 2018, pp.12-17
- VII. Phish-IRIS: A New Approach for Vision Based Brand Prediction of Phishing Web Pages via Compact Visual Descriptors  
Dalgic F. C., BOZKIR A. S., AYDOS M.  
2nd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT), Kizilcahamam, Turkey, 19 - 21 October 2018, pp.176-183
- VIII. Spam E-Mail Classification by Utilizing N-Gram Features of Hyperlink Texts  
BOZKIR A. S., ŞAHİN E., AYDOS M., AKÇAPINAR SEZER E., ORHAN F.  
The 11th IEEE International Conference AICT2017, Moscow, Russia, 20 - 22 September 2017
- IX. A New Approach to Utility-based Privacy Preserving in Data Publishing  
Vural Y., AYDOS M.  
17th IEEE International Conference on Computer and Information Technology (CIT) / IEEE Int Workshop on Secure and Resource-Efficient Edge Computing (SecureEdge) / IEEE Int Symposium on Recent Advances of Computer and Information Technologies (RACIT), Helsinki, Finland, 21 - 23 August 2017, pp.204-209
- X. A Review on Cyber Security Datasets for Machine Learning Algorithms  
Yavanoglu O., AYDOS M.  
IEEE International Conference on Big Data (IEEE Big Data), Massachusetts, United States Of America, 11 - 14 December 2017, pp.2186-2193
- XI. Trustworthy Scrum: Development of Secure Software with Scrum  
Koc G., AYDOS M.  
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October

## Supported Projects

AYDOS M., Project Supported by Other Private Institutions, Akredite Ortak Kriterler Değerlendirmeleri Süreç İyileştirme ve Ürün Geliştirici Değerlendirme Delilleri Oluşturma Platformu Projesi (SPIDER Projesi), 2017 - Continues

AYDOS M., Project Supported by Other Private Institutions, Bütünleşik IT ve Güvenlik Yönetim Platformu Geliştirme Projesi, 2016 - 2018

AYDOS M., Project Supported by Other Private Institutions, Akıllı Süreç İzleme Yönetim Analiz Platformu, 2016 - 2017

AYDOS M., Project Supported by Other Private Institutions, E-Posta Siber İstihbarat Merkezi, 2015 - 2017

AYDOS M., Project Supported by Other Private Institutions, Siber Saldırılara Karşı Güvenli Ağ Cihazı, 2013 - 2016

AYDOS M., Project Supported by Other Private Institutions, Yeni Nesil Güvenli Reklam Dağıtım Platformu: AdTrust, 2014 - 2015

AYDOS M., Project Supported by Other Private Institutions, Map2Heal: Sağlığın Haritası, 2014 - 2015

## Metrics

Publication: 22

Citation (WoS): 29

Citation (Scopus): 69

H-Index (WoS): 3

H-Index (Scopus): 4

## Non Academic Experience

TÜBİTAK

rTrust Technologies

INTEL