# İLKER ÖZÇELİK ASST. PROF.

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Address : Recep Tayyip Erdoğan Üniversitesi, Mühendislik ve Mimarlık Fakültesi, Bilgisayar Mühendisliği Bölümü Zihni Derin

Yerleşkesi 53100 Merkez / Rize International Researcher IDs ORCID: 0000-0002-2032-1640 Yoksis Researcher ID: 238463

# Learning Knowledge

Doctorate	Clemson University, Türk Dili-Edebiyatı Araştırma-Uygulama M, Elektrik Mühendisliği, United States Of America	
2010 - 2015		
Postgraduate	Syracuse University, Türk Dili-Edebiyatı Araştırma-Uygulama M, Elektrik	
2008 - 2010 Mühendisliği, United States Of America		
Undergraduate	Marmara University, Faculty Of Technical Education, Elektronik - Haberleş	
2000 - 2005	Eğitimi, Turkey	

# Foreign Languages

English, C1 Advanced

# Dissertations

Doctorate, DDoS Attack Detection amd Mitigation, Clemson University, Mühendislik Fakültesi, Elektrik Mühendisliği, 2015 Postgraduate, Voice Activity Detection Using Stochastic Resonance, Syracuse University, Mühendislik Fakültesi, Elektrik Mühendisliği, 2010

# Academic Titles / Tasks

Assistant Professor	Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ,
2019 - Continues	BİLGİSAYAR MÜHENDİSLİĞİ
Assistant Professor	Recep Tayyip Erdogan University, Mühendislik Fakültesi, Elektrik ve Elektronik
2018 - 2019	Mühendisliği Bölümü
Assistant Professor	Recep Tayyip Erdogan University, Mühendislik Fakültesi, Elektrik - Elektronik
2016 - 2018	Mühendisliği

Recep Tayyip Erdogan University, Mühendislik Fakültesi, Elektrik - Elektronik Mühendisliği

# Supported Projects

- 1. ÖZÇELİK İ., TUBITAK Project, Altın Çağ'ı Kodluyorum, 2018 2018
- 2. ÖZÇELİK İ., Other International Funding Programs, Internet Freedom for West Africa Project, 2012 2016
- 3. ÖZÇELİK İ., Other International Funding Programs, EAGER-GENI Experiments on Network Security and Traffic Analysis Project, 2010 2012

## **Awards**

1. ÖZÇELİK İ., Best Idea Award by both peers and faculty (Group Project), DFG/GENI 1st Doctoral Consortium, March 2011

# Scholarships

2219 YURT DIŞI DOKTORA SONRASI ARAŞTIRMA BURSU, TUBITAK, 2018 - 2020 YLSY, Ministry of Education, 2007 - 2015

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

1. Distributed Denial of Service (DDoS): A History

Brooks R. R., Yu L., ÖZÇELİK İ., Oakley J., Tusing N. IEEE ANNALS OF THE HISTORY OF COMPUTING, vol.44, no.2, pp.44-54, 2022 (SCI-Expanded)

2. Stealthy Domain Generation Algorithms

Fu Y., Yu L., Hambolu O., Ozcelik I., Husain B., Sun J., Sapra K., Du D., Beasley C. T., Brooks R. R. IEEE TRANSACTIONS ON INFORMATION FORENSICS AND SECURITY, vol.12, no.6, pp.1430-1443, 2017 (SCI-Expanded)

3. Deceiving entropy based DoS detection

Oezcelik I., Brooks R. R. COMPUTERS & SECURITY, vol.48, pp.234-245, 2015 (SCI-Expanded)

# Articles Published in Other Journals

1. Siber Terör ve DDoS

ATASEVER S., ÖZÇELİK İ., SAĞIROĞLU Ş.

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, pp.227-233, 2019 (Peer-Reviewed Journal)

## **Books & Book Chapters**

1. Distributed Denial of Service Attacks: Real-world Detection and Mitigation

ÖZÇELİK İ., BROOKS R. R.

Chapman and Hall/CRC, New-York, 2020

## 2. Target tracking with self- organizing distributed sensors

Brooks R. R., Griffin C., Friedlander D. S., Koch J. D., ÖZÇELİK İ.

in: Distributed Sensor Networks, Second Edition: Image and Sensor Signal Processing, Iyengar S. S., Brooks R. R., Editor, Crc Press, Boca Raton, Fl, pp.131-189, 2012

# Refereed Congress / Symposium Publications in Proceedings

### 1. An Overview of Cryptographic Accumulators

Ozcelik I., Medury S., Broaddus J., Skjellum A.

7th International Conference on Information Systems Security and Privacy (ICISSP), ELECTR NETWORK, 11 - 13 February 2021, pp.661-669

# 2. CryptoRevocate: A Cryptographic Accumulator based Distributed Certificate Revocation List ÖZÇELİK İ., Skjellum A.

IEEE 11th Annual Computing and Communication Workshop and Conference (CCWC), ELECTR NETWORK, 27 - 30 January 2021, pp.865-872

# 3. MARS: Machine Learning Based Adaptable and Robust Network Management for Software-defined Networks

KANDAH F., ÖZÇELİK İ., HUBER B.

IEEE CCWC 2020, Las Vegas, United States Of America, 6 - 08 January 2020

### 4. TRCyberLab: An Infrastructure for Future Internet and Security Studies

Ozcelik I., AKLEYLEK S., ÖZÇELİK İ.

6th International Symposium on Digital Forensic and Security (ISDFS), Antalya, Turkey, 22 - 25 March 2018, pp.431-435

## 5. Digital Freedom and Barriers

ÖZÇELİK İ.

International Workshop Series on Digital Transformation and Artificial Intelligence, 28 December 2017

# 6. Detection and Mitigation of DDoS Attacks in Cyber Space

ÖZCELİK İ.

6th International Certificate Program on: International Cyber Security Workshop Certificate Program, 23 - 27 May 2016

## 7. Cusum - Entropy: An efficient method for DDoS attack detection

ÖZÇELİK İ., Brooks R. R.

4th International Istanbul Smart Grid and Cities Congress and Fair, İstanbul, Turkey, 20 - 21 April 2016, pp.1-5

# 8. Cusum - Entropy: An efficient method for DDoS attack detection

Ozcelik I., Brooks R. R.

4th International Istanbul Smart Grid Congress and Fair (ICSG), İstanbul, Turkey, 20 - 21 April 2016, pp.85-89

#### 9. Deceiving Entropy Based DoS Detection

Oezcelik I., Brooks R. R.

Conference on Signal Processing, Sensor/Information Fusion, and Target Recognition XXIII, Massachusetts, United States Of America, 5 - 08 May 2014, vol.9091

## 10. Operational system testing for designed in security

Özçelik I., Brooks R. R.

8th Annual Cyber Security and Information Intelligence Research Workshop: Federal Cyber Security R and D Program Thrusts, CSIIRW 2013, Oak Ridge, TN, United States Of America, 8 - 10 January 2013

# 11. DoS Detection is Easier Now

Ozcelik I., Fu Y., Brooks R. R.

2nd GENI Research and Educational Experiment Workshop (GREE), Utah, United States Of America, 20 - 22 March 2013, pp.50-55

# 12. Performance Analysis of DDoS Detection Methods on Real Network

ÖZÇELİK İ., Brooks R. R.

The First GENI Research and Educational Experiment Workshop, Los Angeles, Ca, United States Of America, 15 - 16 March 2012, pp.1-4

### 13. Security experimentation using operational systems

Özçelik I., Brooks R. R.

7th Annual Cyber Security and Information Intelligence Research Workshop: Energy Infrastructure Cyber Protection, CSIIRW11, Oak Ridge, TN, United States Of America, 12 - 14 October 2011

#### 14. Noise Tolerant Symbolic Learning of Markov Models of Tunneled Protocols

Bhanu H., Schwier J., Craven R., Ozcelik I., Griffin C., Brooks R. R.

7th IEEE International Wireless Communications and Mobile Computing Conference (IWCMC), İstanbul, Turkey, 4 - 08 July 2011, pp.1310-1314

## Academic and Administrative Experience

2019 - Continues	Head of Department	Recep Tayyip Erdogan University, MÜHENDİSLİK VE MİMARLIK FAKÜLTESİ, BİLGİSAYAR MÜHENDİSLİĞİ
2017 - 2019	Head of Department	Recep Tayyip Erdogan University, Mühendislik Fakültesi, Bilişim Sistemleri Mühendisliği Bölümü

# Memberships / Tasks in Scientific Organizations

Bilgi Güvenliği Derneği, Member, 2017 - Continues ACM, Member, 2014 - Continues IEEE, Member, 2009 - Continues

# Scientific Research / Working Group Memberships

YÖK Siber Güvenlik Çalışma Grubu, Yükseköğretim Kurulu, Turkey, N/A, 2017 - 2018

#### Metrics

Publication: 20 Citation (WoS): 57 Citation (Scopus): 87 H-Index (WoS): 4 H-Index (Scopus): 4

# Congress and Symposium Activities

International Congress on Big Data, Deep Learning and Fighting Cyber Terrorism, Attendee, Ankara, Turkey, 2018
International Congress on Big Data, Deep Learning and Fighting Cyber Terrorism, Session Moderator, Ankara, Turkey, 2018

2018 6th International Symposium on Digital Forensic and Security (ISDFS), Attendee, Antalya, Turkey, 2018 International Workshop Series on Digital Transformation and Artificial Intelligence, Invited Speaker, İstanbul, Turkey, 2017

International Workshop Series on Digital Transformation and Artificial Intelligence, Attendee, İstanbul, Turkey, 2017 3rd Cyber Warfare and Security, Attendee, Ankara, Turkey, 2017 ISCTurkey 2017, Attendee, Ankara, Turkey, 2017

ISCTurkey 2017, Session Moderator, Ankara, Turkey, 2017

Siber Güvenlik Ekosisteminin Geliştirilmesi ve Kümelenme, Attendee, Ankara, Turkey, 2017

YÖK Siber Güvenlik Çalışma Grubu Toplantısı, Attendee, Turkey, 2017

6th International Certificate Program on: International Cyber Security Workshop Certificate Program, Attendee, Turkey, 2016

6th International Certificate Program on: International Cyber Security Workshop Certificate Program, Invited Speaker, İstanbul, Turkey, 2016

4th International Istanbul Smart Grid and Cities Congress and Fair, Attendee, İstanbul, Turkey, 2016

Signal Processing, Sensor/Information Fusion, and Target Recognition XXIII. SPIE, Attendee, Maryland, United States Of America, 2014

Second GENI Research and Educational Experiment Workshop, Attendee, United States Of America, 2013
The First GENI Research and Educational Experiment Workshop, Attendee, California, United States Of America, 2012
Wireless Communications and Mobile Computing Conference (IWCMC), Attendee, --Seçiniz--, Turkey, 2011
DFG/GENI 1st Doctoral Consortium, Attendee, United States Of America, 2011

#### Research Areas

Information Systems, Communication and Control Engineering, Communication Engineering, Communication Networks, Signal Processing, Signal Processing for Communication, Speech Analysis and Processing Techniques, Computer Sciences, Information Security and Reliability, Information System Reliability, Engineering and Technology