

# Ahmet Kapkic

YOUNGSTOWN · OHIO · USA

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## Research Interest

I am interested in creating value from data and making it secure through AI methods. Currently, I am excited about the opportunities with the newest innovations in generative text, GPT-3 being the most notable and using Machine/Reinforcement Learning for cyber security. I investigate these fields through my research projects and my role as a member in the Secure Systems Lab at New York University. Previously I have conducted and research in the fields of Cyber Security, Artificial Intelligence (Image Recognition), Big Data Analytics, and Machine Learning, analyzing file logs to improve cloud storage system performances.

## Education

### Youngstown State University

MASTERS IN COMPUTING INFORMATION SYSTEMS, GPA: 4.00/4.00

- Advised by Assoc. Prof. Dr. Yong Zhang
- 2019 & 2020 YSU Graduate College Premiere Scholarship

Youngstown, Ohio, USA

Aug 2019 - May 2021

### Gazi University

B.SC. COMPUTER ENGINEERING, GPA: 3.01/4.00

- TUBITAK 2242 District Finalist
- TUBITAK 2209-B Thesis Support
- Dell EMC Envision the Future Competition Finalist
- Worked at the Biometric and IPv6 Laboratory for 4 years under the supervision of Prof. Dr. Seref Sagiroglu

Ankara, Turkey

Sep 2014 - Oct 2018

## Experience

### New York University

SECURE SYSTEMS LAB

Working as a part of the Lind project team, which is a single-process sandbox that provides an option to safely execute programs and control its resource (network, file, memory, cpu, etc.) usage at the process granularity [ss1.engineering.nyu.edu/projects#lind](https://ss1.engineering.nyu.edu/projects#lind).

New York, USA

May 2021 -

### Youngstown State University

PART-TIME FACULTY

Teaching Human-Computer Interaction, System Configuration and Maintenance and E-commerce Programming classes.

Youngstown, Ohio

Aug 2021 -

### Futuretech

SOFTWARE ENGINEER

Maintained and updated both front and backends of FaceAnalytic, a system that does personality analysis from face images. Developed an iOS app for it and published it to the App Store. Managed the hosting and domain systems and published the company's website (Stack: Java, Swift, Jenkins, Wordpress).

Ankara, Turkey

May 2019 - Aug 2019

### Basarsoft

SOFTWARE ENGINEER, ANDROID

Had a 2-month internship at the R&D department, focusing on Mobile Application Development and GIS (Stack: Java, Swift, GitLab).

Ankara, Turkey

Jun 2017 - Aug 2017

### HP2M

SOFTWARE ENGINEER, LEAD

Led a team of 4 to develop several apps in full stack. Led the app initiative on "Muhafiz", a panic button application designed for emergency situations. Published on both Android and iOS marketplaces. Created and managed hp2m.com for two years. Created and published "Gazi+", a student information system on Android for students of Gazi University (Stack: Swift, Obj-C, Java, PHP, MySQL/CSS, HTML, PHP, Google Analytics/SEO).

Ankara, Turkey

Mar 2015 - Apr 2017

## Teaching

### Youngstown State University

HUMAN-COMPUTER INTERACTION, CSIS 3731

Teaching the fundamentals of HCI, properties of a good UI and UX, and the theories. Using Designing the User Interface as the source material and real-life examples. 28 Students.

Faculty

Fall 2021

Teaching with a focus on server side programming related to electronic commerce, using PHP, SQL, and MySQL. 20 Students.

#### SYSTEM CONFIGURATION AND MAINTENANCE, CSIS 2620

Providing the student with the information necessary to install, maintain and troubleshoot hardware and software components of computer systems. With a focus on CompTIA's Latest A+ 220-1001/1002 objectives. 17 Students.

#### People Caring for the Future (CARFU)

#### ANDROID DEVELOPMENT

Volunteered as an instructor teaching high school students Android Development for six weeks as a social responsibility project conducted by a collaboration between Gazi University and CARFU.

## Community

### GaziCyber

#### FOUNDING PRESIDENT

To raise Cyber Security awareness and inspire students, I founded a Cyber Security community. Given the positive feedback, we went on to host our events, participate in CTF competitions and academic conferences, and have received several awards.

### ISACA Ankara Chapter

#### BOARD MEMBER

Working with industry professionals in Auditing Information Systems, organizing events, and translating COBIT framework books into Turkish.

### Gazi BIDISEC (Big Data and Information Security Center)

#### MEMBER

Writing articles and doing research on Big Data and Information Security. Also, I have built and managed a Hadoop cluster from scratch to be used internally in the college for Big Data research purposes.

### Oracle Academy

#### TRANSLATOR

Volunteered as a part of the translation team localizing Alice3 software in Turkish in a collaboration between Carnegie Mellon University and Oracle Academy Ankara division.

## Journal Publications

### An Analysis on Wireless Network Device Access Security and Awareness: Case Study of Ankara

INTERNATIONAL JOURNAL OF INFORMATION SECURITY ENGINEERING, VOLUME: 1, ISSUE: 1, PAGES: 11-19

[https://www.researchgate.net/publication/313847809\\_KABLOSUZ\\_AG\\_CIHAZI\\_ERISIM\\_GUVENLIGI\\_VE\\_FARKINDALIK\\_ANALIZI\\_ANKARA\\_ORNEGI](https://www.researchgate.net/publication/313847809_KABLOSUZ_AG_CIHAZI_ERISIM_GUVENLIGI_VE_FARKINDALIK_ANALIZI_ANKARA_ORNEGI)

U. Yavanoglu, A. Kapkic, S. T. Yagci, C. Aktepe, G. Tuncer

## Conference Publications

### Big Data Analytics in Cloud File Logs

IEEE INTERNATIONAL CONGRESS ON BIG DATA, DEEP LEARNING AND FIGHTING CYBER TERRORISM (IBIGDELFT)

A. Kapkic, E. Cakici, E. Canbaz

### Assessment of Wireless and IoT Security Awareness: A Case Study

7TH INTERNATIONAL CONFERENCE ON ADVANCED TECHNOLOGIES (ICAT'18)

B. Ozcakmak, A. Kapkic, B. Bagiroz, A. Koc, U. Yavanoglu

## Workshop and Abstract Publications

### Cyber Threats, Cyber Awareness

WORKSHOP ON NUMERICAL COMMUNICATION TECHNIQUES AND TECHNOLOGICAL DEVELOPMENTS IN COMMUNICATION

SYSTEMS IN FIGHTING FOREST FIRES

A. Kapkic, G. Acikgoz

### Mobile Devices and Cyber Security Awareness

INTERNATIONAL CONFERENCE ON INFORMATION SECURITY AND CRYPTOLOGY (ISCTURKEY 2017)

A. Kapkic, G. Acikgoz

## Other Publications

### Using Big Data Analytics and Artificial Intelligence Models to Analyze Cloud File System Records (In Turkish)

Book Chapter

YAPAY ZEKÂ VE BÜYÜK VERİ KİTAP SERİSİ 3 (EN: ARTIFICIAL INTELLIGENCE AND BIG DATA BOOK SERIES 3)

2021, Being Published

A. Kapkic, Y. Tulgar, S. Sagioglu

#### Translations

Translator

ISACA

2019-2021

- CISA Review Manual, 27th Edition (Turkish), ISBN: 978-1-60420-855-9
- COBIT Focus Area: Information Security (Turkish), ISBN: 978-1-60420-851-1
- COBIT 2019 Design Guide: Designing an Information and Technology Governance Solution (Turkish), ISBN 978-1-60420-809-2
- COBIT 2019 Framework: Introduction and Methodology (Turkish), ISBN: 978-1-60420-807-8
- COBIT 2019 Implementation Guide (Turkish), ISBN: 978-1-60420-810-8
- Implementing the NIST Cybersecurity Framework Using COBIT 2019 (Turkish), ISBN: 978-1-60420-821-4

## Notable Projects

### Big Data Analytics on Cloud File Systems; Case Analysis on File Access Dates

GROUP LEAD

Jan 2018 - Sep 2018

In a collaboration between a cloud storage provider company and Gazi University, I led the student team to analyze the cloud logs to improve cloud system performance. To predict usage and detect anomalies in the cloud files, utilized Java and Spark in a Hadoop environment to apply different regression and scaling on millions of cloud file logs. As the result, we have determined and provided several key aspects, regression trees, and an output with predicted actions for the data orchestrator. This project also has been awarded a monetary grant and accepted to the district exhibitions regarding data science on separate occasions from the country's most prestigious scientific institution, TUBITAK; and became an international finalist at Dell EMC Envision the Future competition.

## Honors & Activities

#### Honors

**Top 500** OpenAI Codex Challenge (2021).

**Top 5** Gazi CTF (2018).

**Finalist** Fight4J Java Programming Contest (2016).

**Top 20** HackingWars CTF (2016).

**Outstanding Achievement Award** DKHOCTF (2016).

#### Activities

**Organizing Committee Member** 12th International Conference on Information Security and Cryptology, (Ankara, Turkey, 2019).

**Speaker** International Child and Information Safety Congress "Digital Games", (Ankara, Turkey, 2018).

**Organizing Committee Member** 12th International Workshop on Industry and Computer Security, (Eskisehir, Turkey, 2017).

**Organizing Committee Member** Big Data Analytics, Security and Privacy Workshop, (Ankara, Turkey, 2016).

## Patents

### Measuring Long Distances in Outdoor Environments Using Mobile Devices and Determining the Accuracy of a Shared Status

PENDING

TURKISH PATENT APP. 2018/20111

2018

S. Sagioglu, A. Kapkic\* (\*equal contribution)

## Technical Skills

**Programming** Python, Java, C, SQL

**ML Frameworks** PyTorch, TensorFlow, CUDA, Spark, Hadoop

**Others** Linux, Docker, GPT3, IPythonNotebook, Google Colab, Git, Github, AWS S3, AWS EC2,  $\LaTeX$