

DERIN CAYIR

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EDUCATION

Florida International University

PhD Computer Science *GPA: 4.0*

Miami, FL

Dec 2022 - Dec 2027

Bilkent University

BSc Electrical and Electronics Engineering *GPA: 3.1*

Turkey

Sep 2018 - Aug 2022

RESEARCH PUBLICATIONS AND PROJECTS

SoK Paper on Extended Reality Device's Security and Privacy

Published a Systematization of Knowledge (SoK) [paper](#) on the prestigious journal IEEE Security and Privacy's Special Issue on Security and Privacy for the Metaverse

Speech Content Extraction from VR IMU Sensors *Unreal Engine, Python, MySQL, C++*

Found that through a benign-looking malicious app, the data collected from accelerometer and gyroscope sensors can reveal the speech content such as digits said, SSN, birthdate, and the gender of the user with 90% accuracy. Analyzed different time and frequency domain features with Machine Learning models.

Healthcare Workers' Perception of Security Rules *Statistics and Data Analysis*

Conducted comprehensive research on HIPAA compliance in healthcare by analyzing the survey data from 70 healthcare workers, demonstrating skills in data analysis and technical problem-solving. Identified key factors in the data where certain behavioral characteristics of healthcare workers tend to predict their behavior and attitude toward security.

WORK EXPERIENCE

Florida International University

Graduate Research Assistant

Miami, FL

Aug 2022 - Present

- Member of the The Cyber-Physical Systems Security Lab (CSL)
- Working on the security and privacy of Augmented Reality, Virtual Reality, and Mixed Reality Devices
- TA for two Graduate Level EEL 6787 Network Security, and EEE 5718 IoT Security and Privacy Classes
- Conducted 11 hands-on labs where each lab we used a different IoT device

TUBITAK

Researcher

Turkey

Dec 2021 - Aug 2022

- The Scientific and Technological Research Council of Turkey, Worked on different telecommunication projects

ARCELIK

Project Team Member

Turkey

Aug 2021 - Aug 2022

- Created a refrigerator system that is powered by solar panels. Worked on the feedback control system of converters.

HAVELSAN

Software Engineering Intern

Turkey

Jun 2021 - Aug 2021

- Worked on autonomous vehicle systems and developed a project to detect traffic signs.

ISSD

Software Engineering Intern

Turkey

Jun 2020 - Aug 2020

- Developed an automatic live outdoor parking space counter system that displayed the number of available lots from camera input

SKILLS

Programming Languages:	Python, C/C++, SQL, VHDL, Assembly 8051
Technical Software:	MATLAB, Simulink, LTspice, Proteus, Wireshark
ML:	Scikit-learn, NumPy, Pandas, TensorFlow, OpenCV
Productivity:	Latex, MS Office
Related Coursework:	Data Structures and Algorithms, Machine Learning, Artificial Intelligence
(cont.):	Statistics and Data Analytics, Probability, Principles of Database Management Systems