

Emre Kalaycı

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SUMMARY

Throughout my computer engineering studies from 2018 to 2023, I strive to developed a foundation in both the theoretical and practical aspects of embedded software.

EDUCATION

Ahi Evran University Computer Engineering - (2.95)

Bachelor's Degree

Kırşehir

Graduation Date: ? - 2024

PROJECT EXPERIENCE

Embedded System Applications - *STM32F407 Discovery Board*

- Basic GPIO, ADC/DAC, Timer application
- Use of alphanumeric LCD module, 4-bit parallel communication
- Push button, matrix keyboard applications
- Now -- UART communication, terminal communication with PC, communication applications with GNSS module

E-Commerce Mobile Application - *React Native*

- A mobile app for online shopping built with React Native for cross-platform use, MongoDB for data management, and custom API integration for dynamic content.

Night Light Control With Voice Recognition - *Arduino Uno*

- A voice-activated light switch using Arduino, with a built-in microphone for audio signal capture and a pretrained model for command recognition ("Yes" for on, "No" for off).

Web Application Firewall (WAF) - *Python, Machine Learning*

- Data Preparation: Utilizes pandas for cleaning and preprocessing CSV datasets for firewall algorithm training.
- ML Attack Prediction: Integrates TfidfVectorizer and LogisticRegression to analyze and predict potential attacks from web requests in real-time.
- Evaluation: Uses accuracy and F1 score for model tuning.
- Monitoring: Captures packets with scapy, blocks attacks by IP.

SKILLS & INTERESTS

Programming:

C, Python, Basic JavaScript

Others:

HTML, CSS, WordPress,

Numpy, Pandas, Matplotlib

Seaborn, Scikit-Learn, Basic SQL

Development Environments:

Visual Studio, STM32CubeIDE

CI/CD & Project Management:

Version Control: Git

Communities:

Ahi Evran **University** Cyber
Security Community
(2020-2023)