SCReeD Dataset Declaration Form

Dataset name:*   ECU-IoFT

Dataset version:*   1.0

Dataset URL:*   https://github.com/CSCRC-SCREED/ECU-IoFT

Creation date:*   Unknown

Last update:*   19/1/2022

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Keywords:*   Cyberattack, UAV, Dataset, STEM, IDS, IoFT

Description/background:*   Unmanned aerial vehicles (UAVs) are increasingly integrated into STEM education, but their cybersecurity vulnerabilities, particularly in low-end consumer drones, are a significant concern. The education sector's awareness of the risks to students and staff is often limited. To bridge this knowledge gap, the ECU-IoFT dataset has been developed, capturing three known cyber-attacks targeting Wi-Fi communications in an affordable drone. This initiative addresses the absence of publicly available, real-world datasets on cyberattacks in the Internet of Flying Things (IoFT). The dataset aims to aid cybersecurity researchers and UAV manufacturers in developing stronger defenses and more secure products, with plans to expand its scope to include more attacks and adapt it for big data analysis.

Dataset funding: N/A

Attribute details:*   ID | Time | Source | Destination | Protocol | Length | Info | Type | Type of Attack | Attack Scenario

Intended target (if specified): N/A

Format:*   Comma-Separated Values

License:*   Open Access

Standard compliance: N/A

Type:*   CSV

Size:*   9.1 MB

Availability: Public

Data status: Available

Data provenance:*   Purpose and Usage

Source computing infrastructure:*   Testbed

Accompanying program(s)/script(s): N/A

Software installer or VM for replication: N/A

Generated or captured via:*   Software

Category/categories:*   Packet capture

Published in: MDPI Applied Sciences

Open research question(s) (if any):   N/A

Potential use case(s) or application area(s): Drones

Data access control:*   Global access

Data retention period:*   N/A

Data validation/checksum:* 7245a656013ad5dc08e94f5913d5caba

GDPR compliance:*   Yes

Consent: Yes

Ethics approval: N/A

Ethics considerations: N/A

☒ I confirm that I have read, understood, and agreed to the submission guidelines, policies, and submission declaration.

☒ I confirm that the contributors of the dataset have no conflict of interest to declare.

☒ I agree to take public responsibility for my dataset's contents.

Signature on behalf of Corresponding Author   Date: 15/3/2024

(signed on behalf of all contributors)