

# **IoT Cyber Security Excellence**



# **OcyberWhiz**

for

# Edge · Mobile · Cloud





### IoT Cyber Security Regulations

**United Kingdom** PSTI (Secure by Design)

Canada PIPEDA (Focus on privacy)

#### United States of America

Cybersecurity Improvement Act State laws: California, Oregon, and more

#### Brazil

Requisitos de segurança cibernética para equipamentos para telecomunicações

European Union Radio Equipment Directive: Delegated Act for cyber security **European Union** Cybersecurity Act: IoT Certification Scheme **European Union** Cyber Resilience Act



- UK is a subset of ETSI EN303645. UK's PSTI Bill is active since 2024 April!
- Deadline for being %100 compatible to RED DA(EN18031) for all IoT device manufacturers for EU is 2025 August!
  - Cyber Resilience Act(CRA) will be mandatory for EU after 2027 December!



# CyberWhiz Embedded

#### Hardware & Software Security Solutions



Secure Bluetooth&Wi-Fi Combo Module with ESP32 and ECC608 HSM

Compliance with all IoT cyber security **REGULATIONS** 

Radio Equipment Directive (RED DA) & Cyber Resilience Act (CRA) & ETSI EN303465

Low price and high quality driven by high volume usage

Microchip Authorized Design Partner for embedded security



### **Software Only Security Solutions**



We can secure any MCU/MPU and any IoT device

Compliance to RED DA & CRA & UNECE R155&156

ETSI EN303645 cannot be satisfied with SW only security solutions

We can secure Bare Metal, Free RTOS, Embedded Linux/Android OS

IoT Security Championship Award in 2018 due to our Bluetooth TLS solution





## CyberWhiz Mobile

### **Mobile Application Security**



Security library for any iOS&Android mobile application

Integration lasts only **1 min** with **one line of code** 

Compatible with Native iOS&Android, Flutter or React Native based apps

Make application 100% compliant to **OWASP Mobile Top10** 

< CRA will consider 'Digital Elements' like mobile application >

\* Man in the Middle

#### **Key Features**





Simulator/Emulator Detection











**Hooking Detection** 

Root/Jailbreak Detection, Emulator Detection

Hooking Detection, Malware Detection, Proxy Detection

MITM\* Detection, Unsecure Network Detection, Obfuscation

Periodic Penetration Test support by RED TEAM

< **POST QUANTUM CRYPTOGRAPHY** Algorithms Integration >

### CyberWhiz Defence Center

### 24/7 Security Monitoring



Monitor IoT devices and mobile applications seamlessly Real-time monitoring for smart home devices, EV Chargers, Vehicles Provides the capabilities of VSOC (Vehicle Security Operations Center) AI based defence center that can detect cyber anomalies instantly

< Cyber Security Monitoring is MANDATORY under RED DA and CRA>

#### **Incident Response Service**



Continuous analysis of **cyber logs** ensures proactive threat detection **Instant attack detection** for IoT devices and/or mobile applications Automated management of **Vulnerability Disclosure Policies Incident Response Services** powered by our expert **PURPLE TEAM** 

< Full compliance with CRA and UNECE R155&R156 regulations >



## CyberWhiz Red Team Services

### **IoT Penetration Testing**



Embedded Systems penetration test for any MCU/MPU

Any wired or wireless communication channel penetration test

UART, SPI, I2C, USB, ETHERNET, CAN BUS, UDS

Bluetooth, Wi-Fi, Lora, Zigbee, 5G

< Regulations require periodic penetration tests >

\* Cloud Service Provider

#### **Mobile & Cloud Penetration Testing**





End-to-End vulnerability analysis

Mobile application reverse engineering

Cloud security assessment

Cloud penetration test for any CSP\* like AWS, Azure, Google

< CRA includes mobile application and cloud >

## CyberWhiz Purple Team Services

#### **RED DA and CRA**



EU Radio Equipment Directive and Cyber Resilience Act

Compliance to every national & international IoT Security standards

UK **PSTI**, US Cyber Trust Mark, Singapore CSLS

ETSI EN303645, EN18031

< Consultancy for ALL IoT Security Regulations >

\* Threat and Risk Assessment

#### **Automotive Cyber Security**



**ISO 21434:** Cyber Security Management System (CSMS)

**ISO 24089:** Software Update Management System (SUMS)

UNECE **R155&156** 

**SBOM** Management and **TARA**\* Workshop and Trainings

< Holistic Automotive Cyber Security >

# CyberWhiz Blue Team Services

#### **Embedded Security**



Embedded software security design for any type of MCU and MPU

> Secure bootloader design and image-signing processes

**Provisioning** services and **SBOM** generation

#### Post Quantum Cryptography

algorithm integration for secure boot and edge-to-cloud communication

**Business Model: Per Product** 

#### **Mobile Application Security**



Mobile application security libraries for Native iOS&Android, React Native, Flutter

> Secure code practices for Kotlin, Go, Swift

**Post Quantum Cryptography** algorithm integration for mobile to cloud communication

**Business Model: Annual Subscription** 



**Bluetooth TLS Library** for more secure BLE

#### **Cloud Security**



Cloud security assessment and design for AWS, Azure, Google and others

IoT Cloud Services design with implementing security best practices

**DevSecOps** and **CI/CD** implementations

Post Quantum Cryptography algorithm integration to prevent «Harvest now, decrypt later» attacks

#### **Business Model: Annual Subscription**





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