## DMYTRO KUSHCHEVSKYI



#### SOFTWARE ENGINEER

## **Education:**

National aviation university: Cybersecurity (2017 - 2021 Bachelor; 2021 - 2023 Master)

**UNIT Factory** 

(2017 - 23 Nov. 2019)

Yep!Starter

(10 Oct. 2018 - 17 Dec. 2018)

## Languages:

English - Intermediate Russian - native Ukranian

# **Technical skills:**

### Languages:

C/C++, Python, Bash - main stack Go, JavaScript, Lua, Pascal, GLSL - additional

#### OS:

OpenWRT, Raspbian, FreeRTOS, Desktop Linux

#### Linux:

initd, systemd, Networking, Netlink wpa\_supplicant, hostapd, dpkg

### **Graphics:**

SDL2, OpenGL

#### Other:

Git, Docker, Pytest, Make, Buildroot, Squid, MITMProxy, Jenkins, Jira, Trello

# **Projects:**

github.com/dkushche

# Work experience:

Sirin Software: Embedded software engineer

(May 2019 - now)

Inango Ukraine: C developer (Aug. 2018 – Dec. 2018)

## **Publications:**

POLIT. CHALLENGES OF SCIENCE TODAY 2021 May 13, 2021 National aviation university

Software for performing end-to-end encryption in third party systems

More on my LinkedIn



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# Project 4(Sirin):

#### **Project description:**

The client is an IoT connection provider offering internet connectivity for any smart product, automatically and securely, right out of the box.

#### **Responsibilities:**

Building test system infrastructure (HTTP(s) servers, Netlink, procfs, sysfs, DNS server mocks), improvement of OTA updates for Linux and FreeRTOS devices. Interaction with wifi driver using vendor API. Tasks management, colleagues support, participation in the discussions

#### **Tools & Technologies:**

Python, Bash, C, Linux, FreeRTOS, Docker, Make, Jenkins, Pytest, Netlink, dpkg, initd, systemd, mcuboot

# Project 3(Sirin):

### **Project description:**

The service coordinates workers and managers and records all data in the cloud for further analytics and workflow improvements in smart warehouses, manufacturing facilities, field services, and in a variety of other rugged work environments

#### **Responsibilities:**

Updating wpa\_supplicant for an industrial wearable device. Fixing WiFi connection delay issue

#### **Tools & Technologies:**

Android, ADB, C, wpa\_supplicant, netlink, Make, repo, git

# Project 2(Sirin):

### **Project description:**

The client had a custom router for which he needed firmware. The main task was to create a universal firmware with a user-friendly UI, which makes it possible to configure networks like on advanced routers, as well as to be a station for IoT devices

### Responsibilities:

Improving custom WiFi router firmware. Adding user-friendly UI for network policies manipulation: isolation (adding VLANs for L2, firewall settings for L3), blocking Internet resources(black/white listing), captive portal setup, Wifi management

### **Tools & Technologies:**

OpenWRT, Lua, LuCl ip, iptables, brctl, iw, wpa\_supplicant, dnsmasq, CoovaChilli, Squid transparent proxy, git, das u-boot

# Project 1(Inango):

## **Project description:**

The client had a project that used unsafe functions from libc, such as strcpy. It created security risks and potential overflows. The main objective was to find and fix all unsafe calls

## Responsibilities:

Securing libc functions calls in existed software

## **Tools & Technologies:**

C, Linux, Redmine, GitLab