# **EDUCATION**

### Warsaw University of Technology

Faculty of Electronics and Information Technology - Computer Science Engineer's Thesis: Shellcode similarity analysis by means of its execution graph. Master's Thesis: Methodology of hiding malicious code from antivirus engines. Award (2013): Graduation with distinction for the Engineer's Thesis and very good marks. Award (2014): Graduation with distinction for the Master's Thesis and very good marks.

# XIV LO im. Stanisława Staszica

The best high school in Warsaw and Poland according to the Perspektywy ranking.

### JOB EXPERIENCE

Technical Expert Member

TRUMPF Huettinger

Software Engineer

Mobica

Polish C++ Standardization Body

•	Design and implementation of	of firmware for	<sup>r</sup> plasma	power supplies.

# Senior Software Engineer

- Project leader in the core UI (Qt/QML) feature development for the marine electronics vendor.
- Project leader in the reverse engineering of the gas & fire detection embedded system.

Reviewing, giving opinion and participating in the development of the ISO C++ standard.

### Phoenix Systems

### **Operating System Engineer**

- Project leader in the commercialization of the Phoenix-RTOS for the gas meters industry.
- Design and implementation of a real-time operating system (Phoenix-RTOS) for the embedded devices (full user-kernel space and user-space separation with MMU or MPU).
- Porting POSIX functionality to the Phoenix-RTOS.
- Custom implementation of the DNS and SNMP stacks (client and server).
- Porting GCC compiler and Newlib (libc) for the Phoenix-RTOS in the official GNU repositories.
- Design and implementation of the GUI tools for inspecting the PLC (Power Line Communication) networks in a Smart Grid industry.

# MEng. Jakub Sejdak

Email: kuba.sejdak@gmail.com

Mobile: +48 608 050 163

Date of birth: 08.08.1990 kubasejdak.com

Address: ul. Obrońców Tobruku 27/157, 01-494 Warsaw, Poland

2009 - 2014

2006 - 2009

09.2018 - now

01.2019 - now

05.2015 - 07.2017

09.2017 - 12.2018

06.2012 - 02.2014

12.2011

04.2011

07.2011 - 09.2011

#### Software Engineer

- Award (2015): Bonus award for the hard work and participation in the Tizen TV project.
- Award (2014): Highest performance appraisal in the part (~ 20 people) at the end of year.
- Award (2014): Best employee in the group (~ 80 people).
- Design and implementation of multiple modules in the SMART TV software upgrade.
- Integrating software upgrade with the Tizen operating system (embedded Linux).
- Leader of the internal project with 2 trainees.
- Leader of the software upgrade component with up to 4-5 programmers.

#### Samsung Electronics Poland R&D Center (SRPOL)

#### Junior Software Engineer

- Award (2013): Highest performance appraisal in the part (~20 people) at the end of year.
- Award (2013): SRPOL 2013 4Q Award.
- Implementation of the DVB and ISDB analysis tools.
- Design and implementation of the OTA upgrade transportation protocol for the SMART TV.
- SMART TV software upgrade development: OTN, OTA, USB.

#### RRW Automatic (freelancing)

#### Programmer

• Implementation of the app for configuration of a 3D camera in the dashboards factory.

#### Samsung Electronics Poland R&D Center (SRPOL)

#### Intern

• Implementation of a module for analysis and modification of the MPEG-4 DVB streams on the fly.

#### **RRW** Automatic (freelancing)

Programmer

• Implementation of the app co-operating with a vision system in the pharmacy factory and controlling several production line mechanisms.

#### SKILLS

**Programming languages:** C/C++ (advanced), Bash/Python (basic), Java/C# (basic), ARM asm (basic). **Foreign languages:** English (advanced - CAE certificate). **Other**: driving license cat. A & B, proven leadership skills, good presentation skills.

#### PERSONAL PROJECTS

liballocator - C++17 memory allocator for the embedded systems.

<u>kubasejdak.com</u> - personal website and blog about C++ and current projects.

HAL - Hardware Abstraction Layer with drivers for various chips and platforms.

**OSAL** - Operating System Abstraction Layer supporting various systems (e.g. Linux, FreeRTOS).

<u>platform</u> - Application bootstrap layer for various C/C++ platforms with ready-to-use CMake toolchain files. <u>utils</u> - Set of reusable utility libraries and modules for C++ projects.