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PERSONAL PROFILE

I'm a quality-oriented computer programmer with good problem-solving skills. When I don't understand something, I'm not satisfied with 'this is just how things work' argument. Instead, I dig further until everything is 100% clear. This helps me get better at everything I do.

PROFESSIONAL EXPERIENCE

- 2021 – ● **Fara Polska Sp. z o.o., Senior Software Developer**
Used Go to develop software that runs on NXP i.MX and Qualcomm IPQ4019-based ARM devices used on transit buses and implements ITxPT services, provides GPS coordinates and mobile network connection to other devices on the bus, reads telemetry data from CAN bus and sends it to the central system over MQTT and communicates with other HW components on the bus such as alcolock and infotainment screens over UART and Ethernet.
Used C to extend OpenWRT AR40XX.PHY driver with an ability to power selected ports up or down and get the port power state.
Used C to write a Linux kernel driver that exposes GPIOs connected to an MCU connected to Linux board via UART to /sys/class/gpio and /sys/class/power_management.
Using Go to develop a ThingsBoard IoT REST client used for monitoring and updating firmware across a fleet of vehicles (ongoing project).
- 2020 – 2020 ● **IS-Wireless, Senior Software Developer**
Wrote Bash scripts for deploying company's 4G software stack to remote servers and collecting logs from remote servers.
Created company's lnav (<https://lnav.org>) format.
Used Python and Tkinter to create a GUI tool for running company's 4G stack and collecting logs for use by non-programmers.
Used C to develop company's 4G stack.
- 2019 – 2020 ● **7 Sensing Software BV, Senior Software Developer**
Ported code written in Python to C using fixed-point arithmetic with the final intention to run it on DSP chips without FPU
- 2016 – 2019 ● **Cyfrowy Polsat S.A., Software Developer**
Performed successful bring-ups of new set-top-box development boards based on ARM Cortex-A CPUs with close cooperation with HW engineers.
Used C language to develop an embedded Linux command-line tool and API for performing validation tests of various set-top-box interfaces such as tuners, HDMI, USB, Wi-Fi and Ethernet.
Used C language to develop user space drivers for various devices such as tuner or eight-segment display.
Used Python and ctypes to create Python bindings for C libraries.
Wrote some code for STM32L0 MCU.
- 2012 – 2016 ● **Samsung R&D Institute Poland, Junior Software Developer**
Used C to develop middleware for audio and video control for Tizen-based Smart TVs.
Wrote extensive unit tests for Enlightenment Foundation Libraries.
Worked on EPUB reader for smartphones.
Occasionally conducted a 6-hour Git workshop for beginner and intermediate users well received by participants.
- 2007 – 2011 ● **Telekomunikacja Polska S.A., Database Department, Data Analyst**
Used VBA, VBS and AutoHotKey to create tools for automation of repeatable actions.
Created a set of regular expressions for standardization of legal forms of companies.

EDUCATION

- 2008 – 2016 ● **Vistula University in Warsaw**
Bachelor's degree, Computer Science, final thesis: "Design and implementation of static analysis tool for detecting undefined behavior in programs written in C"

SKILLS

- knowledge of C, Go, Python, AWK, ARMv7 assembly, PCRE regular expressions, using Bash as an interactive shell but I prefer to avoid it in scripts and aim for POSIX compliance instead
- knowledge of Linux, Slackware on a daily basis but I also know and used Ubuntu, beginner FreeBSD user. I'm a maintainer of several packages for Slackware hosted at slackbuilds.org
- knowledge of virtualization and container technologies: VirtualBox, Docker
- knowledge of Git and Gerrit, Gitlab, Github, Bitbucket and e-mail patch-based review systems and Atlassian Bamboo and Jenkins CI systems
- experience with ARM and embedded Linux - U-Boot and BOLT bootloaders, building and using cross compilers, Buildroot, Busybox/Toybox, Valgrind, device tree, UBI, OpenOCD, OpenWRT
- experience in working with open source communities – contributions to open source projects such as zathura, makeself, mps-youtube, linux-manpages, devicetree-specification, dtc, can-go