# Sam Protsenko

Software Engineer



# — Summary

Embedded software engineer with more than 10 years of professional experience. Main area of expertise is Linux kernel, bootloaders, firmwares and system level user space programming on ARM-based devices. For the last 5 years has been contributing to open-source projects and been involved with upstreaming activity. Has prior background in cross-platform applications development, algorithms and electronics. Active member of open-source community, mentor, speaker.

# Experience

2018–2020 Team Lead, GlobalLogic, Kyiv.

Projects: Texas Instruments (Linaro assignee for LCG).

Role: Supporting the BeagleBoard X15 board and upstreaming work.

- Porting Android to a new board and upstreaming it with a small team: [1]
- Adopting VPN from upstream kernel in AOSP: [2]
- Implementing Android 10 boot sequence: [3]
- Running Android 10 with mainline kernel on BEAGLEBOARD X15

### 2012–2018 Software Engineer, GlobalLogic, Kyiv.

Projects: Texas Instruments (directly and as Linaro assignee for LEG and LMG), others. Role: Platform development in Linux kernel and bootloaders, upstreaming.

- Implementing and supporting device drivers: [4]
- Maintaining boot sequence and fastboot in U-Boot: [5]
- Board bring ups
- Bug fixing (drivers, device tree, bootloader)
- $\circ~$  Migrating to new kernel versions
- Implementing XIP boot from NOR flash (automotive)
- System boot time optimizations (automotive)
- Supporting Android kernel on TI OMAP4/OMAP5 SoC

## 2009–2012 Software Developer, AlterEGO, Kramatorsk.

Role: Cross-platform software design and coding (C++/Qt).

#### Education

2004–2009 **Specialist degree**, Donbas State Mechanical Engineering Academy, Kramatorsk. Speciality: Automation of technological processes

## Computer skills

Languages C, C++, Bash Projects Linux kernel, U-Boot, Android

CPUs ARM32, AArch64, x86 MCUs STM32, MSP430

Tools GCC, GDB, Make, Git, Vim Hardware JTAG, scope, logical analyzer

# Languages

Ukrainian Fluent My native language
Russian Fluent My native language

English Upper-intermediate Speaking, reading and writing

## Other Activities

2011–Today Maintainer of "INSTEAD" Debian package: [6]

2015–Today Active member on StackOverflow (>10k reputation): [7]

2019 Organizer of "Root Linux Conference" in Kyiv: [8]

2018–Today Creator and instructor of Linux kernel course: [9]

2017–2019 Speaker at Linaro and GlobalLogic events

## References

- [1] https://android-review.googlesource.com/q/author:protsenko
- [2] https://connect.linaro.org/resources/bkk19/bkk19-414/
- [3] https://connect.linaro.org/resources/san19/san19-217/
- [4] https://git.kernel.org/pub/scm/linux/kernel/git/torvalds/linux.git/log/?qt=author&q=protsenko
- [5] https://gitlab.denx.de/u-boot/u-boot/-/commits/master?search=protsenko
- [6] http://packages.debian.org/sid/instead
- [7] https://stackoverflow.com/users/3866447/sam-protsenko
- [8] https://linux.globallogic.com/
- [9] https://github.com/joe-skb7/kernel-lectures