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

2020- Software Engineer, Linaro.

Present Linaro Consumer Group Kernel Team

2018–2020 Team Lead, GlobalLogic, Kyiv.

Project: 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)
- 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

CPUs ARM32, AArch64, x86

Tools GCC, GDB, Make, Git, Vim

Projects Linux kernel, U-Boot, Android

MCUs AM57x, AM65x, STM32, MSP430

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