Oleg Kutkov

Kyiv, Ukraine (open to relocate)
Email: contact@olegkutkov.me
Homepage: https://olegkutkov.me
Github: https://github.com/olegkutkov

LinkedIn: www.linkedin.com/in/oleg-kutkov-9a7069147

Visa status — visa sponsorship required

Embedded & Unix system software/hardware engineer

 Total work experience is over 10 years with great technology companies and research institutes.

- Linux and macOS system/kernel software development and hacking, embedded development (AVR, STM, NXP, QCA), bootloaders, software and hardware reverse engineering, electronics engineering.
- Enthusiastic engineer with great development and debugging experience of complex problems on software and hardware levels.

Skills

Programming languages: C, C++, Python, Shell scripting, Assembly (x86, ARM)

Operating systems: Linux, macOS

Hardware platforms: x86/amd64, NXP LPC, QCA SoCs, STM32, AVR

Debugging tools: GDB, LLDB, Valgrind, Logic analyzers, Oscilloscopes, JTAG debuggers

Databases: MySQL, Sqlite, Oracle

Version Control Systems: Git, Subversion

Collaboration tools: Jira, Confluence, Bugzilla, Teamcity, GitHub, Jenkins

Other: PCB and schematics designing, hardware debugging and hacking, laboratory

instruments.

Professional Experience

Ubiquiti Labs Ukraine | Kyiv, Ukraine

December 2018 to Present

- Firmware support and development for new wireless products (60 GHz 802.11ay, 802.11AX, 802.11be)
- Porting and supporting the new platforms' Linux kernel, U-boot, and other components.
- Operating system low-level support.
- Hot fixing of hardware problems.
- Networking research and optimization.
- Development of the auxiliary tools, debugging instruments, utils, and devices.

Crimean astrophysical observatory | Nauchniy, Ukraine

- March 2016 to October 2018
- Development of allsky robocam and weather monitoring station.
- Development of autonomous cloud sensor and sky quality analyzer
- Telescope Sintez, development of precise positioning hardware and software.
- Development of Linux PCI device driver for rotary encoders interface board
- Development of an auto guider system for a big telescope, client software and motor controller hardware
- Development of the software for scientific purposes: image processing and converting, data analysis
- Radio Astronomy research
- Research of the new variable stars
- Participations in science conferences
- Lecturing

Yandex | Simferopol, Ukraine

March 2013 — **February 2016**

- Development of a user location detection code, area border polygons analysis, development of the modules for data generation, and testing.
- Development of an internal data distribution system using P2P BitTorrent technology.
- C++ and Python modules bindings for Node.JS
- Partial development of the Cocaine cloud platform, Node.JS workers
- Additional infrastructure components

Sunbay Innovations | Simferopol, Ukraine

September 2009 — February 2013

- Responsible for the project releases on all *nix platforms, researching of new platforms (mobile/tablet), head of Unix development.
- Linux and Mac kernel modules development for deep integration with the system's network stack.
- Debugging and patching Android drivers
- Linux and Mac kernels debugging
- Development of the server-side load balancing components.
- Adaptation of the user interface for different Linux distributions and desktop environments

Education

Dates of studying: 2005 – 2011

Name of institution: Kharkiv National Aerospace University

Degree: Master`s Degree in Computer Science

Additional courses: edX MIT Introduction to Aerospace Engineering: Astronautics and

Human Spaceflight

Languages

Russian, Ukrainian English reading, writing, speaking (intermediate)