

# Aleksandr Anisimov System/Embedded Software Engineer

Looking for an Embedded or System Software related position.

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### **SKILLS**

**Basis** C, Bash, GNU make, Git, Perforce, st-link, Trace32 **Have experience with** C++, Python, QML, HTML, CSS, JavaScript, SQL

Other Vim, Markdown, LaTeX, RPM spec

Keywords SSD, STM32, DSP, ARM, TrustZone, REE, TEE, Linux kernel, LDD

### **EDUCATION**

### **National Research Nuclear University MEPhl**

Bachelor's degree, laser physics, sept. 2013 - june 2017 Master's degree, embedded systems, sept. 2017 - june 2019

### **WORK EXPERIENCE**

### Now 2021 - Now

### SSD Firmware Development Engineer @SK Hynix

Memory solutions

- · Implement NVMe SSD firmware layers (HIL/FTL/FIL) in C/C++
  - Implement firmware test code for regression failures/corner cases troubleshooting
  - · Perform firmware code review and improvement
  - · Perform firmware failure analysis and corrective actions applying
  - · Collaborate with SoC/DV/QA/SQE/etc teams involved in SSD product creation process

### Jul 2019 - Nov 2021

## System Software Engineer @Aurora OS

Mobile OS based on Linux

- Development TEE side of Russian fork of Sailfish OS (Aurora OS)
- · Development hardware-backed keystore and trusted services
- · Designed new features for Linux kernel OP-TEE driver for in-house Linux distro
- · CVE fixing for government certification (FSTEK Russia)
- Took part in preparation solution for TEE logger

### Sept 2018 - Mar 2019

## **Embedded Software Engineer @Yandex**

Self-driving cars

- Development emergency stop button for self-driving cars (FreeRTOS, STM32, CAN, radio module)
- · Reverse engineering for update protocol for radio modules to update its firmware by other chip
- · Development from scratch driver for SPI-based e-paper displays
- · Writing unit-tests with cpputest for main board in a car

#### Feb 2018 - Sept 2018

## Embedded Software Engineer @SmartAirkey

Wireless solutions startup

- Development firmware for a Bluetooth-lock based on Nordic BLE stack and FreeRTOS
- · Soldering and testing boards

#### Sept 2016 - Feb 2018

### Junior Embedded Engineer @Amplituda

Radiation safety technologies

- Development firmware for  $\gamma$ -sensors based on RS-485 and stm32f103
- Development low-level drivers for ADC, DAC, OLED, touchscreens, RTC, USB, DHT11, HD44780 etc

#### **ACHIEVEMENTS**

- Fix CVE-2020-6096 in GNU C Library for ARMv7 memcpy(). More info: [link1], [link2], [link3], [link4]
- Loadable plugin framework in OP-TEE project. More info: [link1], [link2], [link3], [link4], [link5], [link6]