

Contact

svitlana.orlova@outlook.com

www.linkedin.com/in/svitlana-orlova (LinkedIn)

svitlana-orlova.github.io/ (Personal)

github.com/svitlana-orlova (Other)

Top Skills

NVIDIA Jetson

C (Programming Language)

Linux Kernel

Languages

Ukrainian (Native or Bilingual)

English (Professional Working)

Svitlana Orlova

Embedded | Linux Developer

Odesa, Odessa, Ukraine

Summary

Experienced Embedded Systems Engineer with 20+ years in both research and

commercial environments across startups and large enterprises.

Adept at

designing and debugging low-level software for microcontrollers and embedded

platforms, with a strong emphasis on safety, performance, and cross-platform

reliability.

- Expert in C/C++ for microcontroller development (ESP32, STM32..)
- Deep knowledge of Linux systems and kernel-level programming
- Precision-driven in microcontroller initialization and memory-safe coding
- Passionate about reverse engineering and protocol analysis
- Hands-on experience with electronics design and troubleshooting

Experience

Unit

Embedded Software Engineer

July 2024 - August 2025 (1 year 2 months)

Kyiv, Ukraine

Developed firmware for STM32F4 microcontrollers

Built desktop applications using Qt for embedded system configuration and diagnostics

Self-employed

Linux Developer

February 2022 - February 2024 (2 years 1 month)

Kyiv, Ukraine

Engineered Linux kernel drivers for video cameras, primarily for NVIDIA Jetson platform

Designed and deployed cross-platform video streaming software (Linux, Windows, macOS)

Programmed microcontrollers including STM32F4 and ESP32, integrating them with host systems

Self-employed

Embedded Developer

April 2020 - December 2020 (9 months)

Kyiv City, Ukraine

Created modular firmware components for ESP32, optimizing for memory footprint and reliability

HW Solutions

Firmware Developer

June 2010 - February 2012 (1 year 9 months)

Odessa, Ukraine

Developed firmware for AVR microcontrollers, including low-level register manipulation and timing-critical routines

sfdev

C Developer

February 2006 - November 2008 (2 years 10 months)

Simferopol, Crimea, Ukraine

Built software for data parsing, database interaction, and web crawlers, using C and shell scripting

Focused on performance tuning and robust error handling in resource-constrained environments

Radio Station

Software Developer

November 2003 - April 2005 (1 year 6 months)

Simferopol, Crimea, Ukraine

Maintained and extended software for hardware systems communicating via serial ports and Ethernet

Managed Unix systems while developing custom tools for device control and monitoring

This role marked the beginning of a long-term focus on embedded systems and low-level programming