



Ivan

KUVALDIN

Software Architect and Engineer



PROFILE

I am software engineer, designer and architect with excellent mathematics and electrical background. I like to create machines and bring them to life - design electronic systems and software for them. My main idea is to teach machines help humanity on their way to unconditional beauty.



CONTACT

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SKILLS



EMPLOYMENT HISTORY



NORMA-C

May 2013 → Sep 2017 (4 years, 5 months)
Hardware Engineer, Software Engineer, System designer

Norma-C.com designs and develops vibration measurement systems. From sensors and primary transducers to solid multilevel systems.

I am one of the idea maintainers. The field of my responsibilities is pretty large, but main position is **senior embedded software developer** with solid knowledge in HW development, circuit and PCB design.

Our devices collect data from sensors in real-time, analyze signals and send data and result to the server via network for post non-realtime analyze. I also take part in algorithm design for many elements in the overall system.



FREELANCE

2016-2017 – 1 year

Software engineer/digner/architect

I implemented cross-patform DSP algorithms in C++, wrote several different network solutions, suitable for embedded devices, desktops and mobile devices. That projects were about processing sound signals and multicasting channels over the real-time network. As architect I designed and draw several ideas and solution for indoor navigation systems from content servers to client application.



ENVISIONTEC

Oct 2017 → Jan 2019 (1 year, 4 months)

Lead C++ engineer and architect, mathematician

Company designs, develops and produces stereolitorgraphic 3-D printers

- Developed firmware for microcontroller in C/C++ for hard-real-time actions: drive motors and gather data from sensors.
- Developed control software for 3D printers in C++/Qt for Linux.
- Designed software architecture and development plan
- Developed update-delivery system to update 3d-printers.
- Drove development process in team of 4 programmers
- Devops: configure and support continuous integration / continues deployment system - GitLab CI/CD and Jenkins



RING

Feb 2019 → Oct 2020 (1 year, 9 months)

Senior Software Engineer

Cameras, lights and home automation.

I participated in firmware development of powered camera devices family. Under the hood there was a Linux-based SDK for ARMv7 with drivers, build system, common packages, and Ring services written in C++. Mainly I developed, ported, and maintained user-space C/C++ programs, and also had a deal with drivers, BSP and build system.



ERGOS

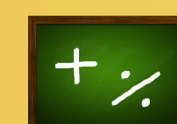
Apr 2012 → May 2013 (1 year, 2 months)

Software and hardware engineer

Ergos LLC is a Ukrainian company, which develops, produce and sell industrial measurement and control devices. Among them temperature and vacuum meters and controllers, complex measurement systems with integration to industrial super systems. And yet another division develops precision temperature calibrators for metrology.

My position and responsibilities

- design analog and digital schematics, trace and test them.
- minimize noise in analog parts of device
- upgrade previous devices generation using modern integrated circuits
- design measure and filtering algorithms
- design 3D models of cases for devices of sheet metal and plastic (secondary)
- render 3D models (secondary)



EDUCATION



KHARKIV NATIONAL UNIVERSITY OF RADIOELECTRONICS

Sep 2007 → Jun 2012

M.S. Radioelectronic equipment and telecommunication

In the university I learned basics of radio-electronics, electrical engineering, circuit and PCB design, computer science, informatics, programming.