

# VLADIMIR IVANOV

☎ +7 (924) 320-09-34 | ✉ person@v-u-ivanov.com

*Vladivostok, Maritime Province, Russia*

## SUMMARY

---

Practical engineer with a focus on the EECS. 3+ years of experience in designing of embedded systems. I have built own experience through hardware and software co-design. Strong skills in electrical engineering, computer science and research area. Looking for new career opportunities in a team of professionals with using of progressive technologies and tools. Main areas of interest are consumer electronics, robotics, automotive and game industry, medical equipment, telecommunication and networks. No blocking problems to work outside the current location.

## EDUCATION

---

**Far Eastern State University, Vladivostok** August 2005 – June 2010

M.S. Departments of General Physics and Electronics.

Degree work was defended in the underwater robotics area.

GPA: 3.63 out of 4.

**Secondary school 51, Vladivostok** September 2003 – June 2005

Secondary education.

In-depth study of Japanese Language.

**Secondary school 51, Vladivostok** September 1995 – June 2003

General education.

In-depth study of Japanese Language.

## SERTIFICATES

---

- Two-month course "6.00.1x: Introduction to CS and Programming". Excellent passing grade. The online learning initiative of Harvard University and MIT, December 2013.
- Three-month course "6.002x: Circuits and Electronics". Maximum passing grade. The online learning initiative of Harvard University and MIT, June 2012.
- Course of Japanese Language. The course of 1150 hours and a number of final exams. Secondary school 51 of Vladivostok, 1995 – 2005.

## PUBLICATIONS

---

- Ivanov V. "The diagnostic system of a motor drive module for a underwater robot". Master thesis. Institute of Marine Technology Problems FEB RAS, Vladivostok, June 2010.

## EXPERIENCE

---

**Rhonda Software Ltd.** October 2012 – present  
*Embedded Software Engineer* Vladivostok, RUS

- CSR plc. contractor. Work on the COACH™ SoC *imaging* platform.
- Distributed supporting of the embedded software for ODM/OEM customers: main brand-manufacturers of imaging devices (digital still cameras, mobile driver recorders, action cameras, etc).
- Support offices are located in a number of countries: China, Israel, Japan, Russia, South Korea, US.
- Solving of time-critical project issues under a customer's pressure. Resolved a number of various "MP block" software and hardware problems. Improved processing performance of UI images for customer's projects.

- Supported *peripheral* domain. CMOS/CCD optic sensors: drivers bug-fixing and implementation of new capabilities, support for smear correction driver owners. NVM storages: filesystem bug-fixing, NAND drivers timing-optimizations. Display cluster: issues related to video output (LCD, HDMI). Volatile-memory storages: DRAM performance measurement and timing-optimizations. On-chip peripheral: support for usual BSP device driver set (GPIO, ADC, PWM, RTC, SPI, I2C, UART, USB, function-specific HW units and more). PC-side applied software: bug-fixing and new features implementation for firmware burning tool. Various peripheral-specific algorithms: e.g. Dynamic Voltage Management based on PID-controller.
- Business trip to CSR Israel (formerly Zoran Corp.): MATAM, Advanced Technology Center, Haifa.

### **Spider Pacific Ltd.**

*Embedded Systems Engineer*

October 2010 – October 2012

Vladivostok, RUS

- Startup for a development of an applied hardware.
- Designed maket of the mechanical-less manipulator as part of the project management software system.
- Designed and manufactured prototype of the valve tubes amplifier for a PC sound cards.
- Designed and manufactured "Power over Ethernet" injector. Implemented physical layer of the IEEE 802.3af specification. The product was used in a number of computer network projects.
- Later, in November-2013, implemented IEEE 802.3af full-compatible prototype for this company based on the LTC4263 IC by Linear Technology Corp.

## **SKILLS**

---

### **SW-Development**

Embedded C and C++: source code mixing, a bit of STL. Interrupt- and event-driven design. Ability to read and write code area on assembler. Development process automation: Python and Perl. Build system: Make and WAF. Multi-threading; Atomthreads, ThreadX. Device drivers. Version control: Perforce, SVN, Git. Code review: Code Collaborator, Review Board. Issue tracking: JIRA, Redmine, eTraxis. Continuous integration: QuickBuild. Code documentation: Doxygen.

### **HW-Development**

Digital/analog/tube circuits design and analysis: electrical and thermal calculations, circuits emulation. Selection of electronic components: excellent guided both in through-hole and surface-mount packages. Routing and assembling of prototype PCBs: Eagle CAD, Sprint Layout, KiCAD, a bit of Altium Designer. Excellent skills in manual soldering.

### **Debugging**

Crash-logs analyzing. Remote debugging: customer support via e-mail threads and Skype in case of non-reproducible locally problems. In-circuit emulation: JTAG. Lab-equipment usage: digital power supply, multimeter, analog/digital oscilloscope, signals generator, autotransformator and more.

### **Languages**

English – professional working proficiency  
日本語 – elementary proficiency  
Russian – native

### **Misc**

Foundations of project management: Spider Project. Lathe and milling works: Proxxon equipment. Bring up of computer networks: OSI. A bit experience in transferring of knowledges to students: electronics and programming foundations.

## KEYWORDS

---

1-Wire, ADC, Altium Designer, Atomthreads, AVR, avr-gcc, Bash, BSP, C, C++, CAN, Code Col-  
laborator, cross-compiler, Cygwin, DAC, device driver, Doxygen, Eagle CAD, Eclipse, eTraxis, FAT,  
FileX, Gerber, Git, GNU toolchain, G-Sensor, gyro sensor, HW/SW co-design, IEEE 802.3af, I2C,  
JIRA, JTAG, KiCAD, libpng, Linux, Make, Maxima, MCS-51, MIPS, OOP, optic sensor, OSI, Per-  
force, Perl, PHP, PIC, Proxxon, Python, QuickBuild, R&D, Redmine, RS-232, RTOS, SPI, SPICE,  
Spider Project, RAW Bayer, Review Board, sde, Source Insight, Sprint Layout, SQL, STL, SVN, T<sub>E</sub>X,  
ThreadX, UART, UML, USB, V8, Visual Studio, WAF, Windows, zlib

## HOBBY AND INTERESTS

---

- Hi-Tech and impacting one on a human being, designing hardware and software
- Physics (two completed university years), applied math, world economic
- Professional sports leagues: NHL, NFL, MLB
- Swimming (sports category), marine multiathlon (sports category)
- Cooking, electronic music