VLADIMIR IVANOV

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Vladivostok, Maritime Province, Russia

SUMMARY

Practical engineer with a focus on the EECS. I have built own experience through hardware and software co-design: 4+ years in designing of embedded systems. 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: 3.6/4.

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.

CERTIFICATES

- Two-month course "6.00.1x: Introduction to CS and Programming". Excellent passing grade. The on-line learning initiative of Harvard University and MIT, December 2013.
- Three-month course "6.002x: Circuits and Electronics". Maximum passing grade. The on-line 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, 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^{TM} *imaging* SoC 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 image sensors: drivers bug-fixing and implementation of new capabilities, support for smear-correction driver team. NV-memory storages: file system 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 (windows forms). 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. October 2010 – October 2012
Embedded Systems Engineer Vladivostok, RUS

- Start-up for a development of an applied hardware.
- Designed model of the mechanical-less manipulator as part of the project management software system.
- Designed prototype of the valve-tube amplifier for PC sound cards.
- Designed and manufactured prototype of "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 manual soldering skills.
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, autotransformer 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. Computer typography: TEX.

KEYWORDS

1-Wire, ADC, Altium Designer, Atomthreads, AVR, avr-gcc, Bash, BSP, C, C++, CAN, Code Collaborator, 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, image sensor, OSI, Perforce, 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, TEX, 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 multi-athlon (sports category)
- Cooking, electronic music