Vyacheslav KARNEICHIK

Belgian nationality, age 41, married

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Enthusiastic Senior Software Developer with over 18 years of experience in field of embedded systems. Profound knowledge in QA, automated testing, implementation of continuous integration and delivery. Good level in hardware design and development. Extensive experience with:

- C/C++   • Linux   • Jenkins   • Python

SKILLS

OS: Windows, Linux (Ubuntu, OperWRT ...), Android, PS3

Languages: C/C++, Python, Java, JavaScript, Groovy, Assembler, PHP, SQL, HTML, XML, JSON

Platforms: x86, PS3 Cell, ARM Cortex M, MSP430, MIPS, Microchip PIC, DSP, Infineon C166

Network: UDP, TCP, HTTP/S, RS232, RS485, I2C, SPI, CAN

Encryption: signature, hash, symmetric key, public key

SCM: Git, GitHub, Subversion, Rational ClearCase

LANGUAGES

English, Russian - full professional proficiency   French, Dutch - limited working proficiency

EXPERIENCE

2015 – Present   **ST** – Senior Software Test Engineer

Testing of software libraries for Secure Microcontrollers. Implementing FIPS 202 (SHA-3 Keccak) and Noekeon in Delphi. Refactoring of legacy code. Full test automation with Jenkins and Python scripts.

2014 – 2015   **SONY** – Senior Software Engineer

Improving telemetry gathering service (18M devices tracked), implemented automated test and deploy system resulting tested line deployed within one-hour instead of days of manual work.

S.M.A.R.T. HDD Data analysis with R, reduced amount of spare units on stock and predict possible shortages. BI tools investigation (MicroStrategy)

Amazon AWS (EC2, S3, VPC ...), Hadoop, Hive, EMR, CloudFormation, Python boto, Jenkins

2010 – 2014   **SONY** – Senior Software Engineer - Music Unlimited

PS3 client- development of audio drivers in C, an application in JavaScript, tests and test automation.

iOS client and Windows 8 client - organisation of testing, reviews

Android client - porting and testing a DRM engine in C, Android NDK, an application in Java, JNI. Development of JavaScript based prototype. Eclipse. Tests and test automation.

PSP client - porting and testing a DRM engine in C, middleware components in C. Tests and test automation.

2008 – 2009   **SONY** – Senior Software Test Engineer - Media Go Windows 7 Middleware
Writing automated tests for DRM, Playback, Installation and upgrade. Maintenance of test DRM server. Microsoft Visual Studio, AutoIt, Jenkins, Tomcat, Java

2004 – 2007   **SONY** – Senior Software Test Engineer - LocationFree
Linux server/client - Porting Streaming server and Client to Linux, porting of tests. GNU C.
LF-PK1 - Windows PC client. Testing of playback, fast zapping. Microsoft Visual Studio
Sony Ericsson Symbian client - Write automated tests suite. CodeWarrior for Symbian OS
PSP client - Test implementation. GNU C-like env
LF-X1 / LF-X5 - Testing of different drivers: UPNP, CompactFlash. MIPS, VxWorks, Tornado

2003 – 2004   **SONY** – Software Test Engineer - embedded library testing
Test specification and implementation on different platforms: MIPS, Intel Celeron and ARM
Implementation of board broker to share CPU boards between tests. MontaVista Linux
TAF – Perl and Java test automation framework - adding features and implement self-testing

2001 – 2003   **RECIF S.A.** – Embedded Software Engineer
Firmware development for 200mm and 300mm wafers handling robots. Keil C, CAN, SEMI SECS
Writing programs for test-beds of separate robots units.

2000 – 2001   **IdentAlink GmbH** – Hardware and Software Engineer
Design of schematics, PCB and firmware development of HyperStone DSP based board for fingerprint scanning. Elaboration of the reconstruction algorithm to resolve a valid image out of frames obtained from Atmel fingerprint thermal sensor.
Development of the Smart Card ISO7816 module for this board.

1998 – 2000   **consortium "Belresource"** – Hardware and Software Engineer
Development of microcontroller based devices on customers' requests.
Design of ISA board and software development to manage SmartMedia and MultiMedia flash memory cards. Prototyping Microchip PIC based solid-state recorder based on these cards.

PET PROJECTS
Bluetooth Low Energy mesh network based on Bluegiga and Nordic Semiconductor devices
Mobile unit with accelerometer, static units with PIR sensors, MQTT for data collection
Keil C, Python, Raspbian, Eagle, BLE, ARM Cortex M, OTA DFU

EDUCATION
1992-1997	**Belarusian State University**, M.S. in Applied Mathematics	
	major in Economical Cybernetics, minor in Banking Information Systems	
1990-1992	**Belarusian State University Lyceum**, Applied Mathematics	
2011	Scrum Alliance, Scrum Master	