

Curriculum Vitae

Personal data

Name: Tomasz Lasko
Born: 1983, Poland
Mobile phone: +48 727 401 441
E-mail: tomasz@lasko.pl
Homepage: www.tomasz.lasko.pl



Summary

Experienced and talented IT professional with deep knowledge and experience of computer science and software development techniques. Quick learner with excellent problem solving and interpersonal skills. Energetic and result-oriented team player and coordinator, always able to carry assignments to a successful finish and always ready to motivate and support others.

Professional experience

- 02.2009-05.2009 **Software Developer at NaviExpert** (www.naviexpert.com), Poznan, Poland
Innovative GPS navigation systems
Tasks: Software development – mobile client and application server
Technologies: TCP/IP, Java (J2ME, J2EE), C# (.NET CF), C++ (Symbian), Multithreading, Bluetooth
- 2008 **MSc thesis project at Poznan University of Technology**
XSockets - cross-platform open source communication framework providing a unified and extensible API for point-to-point communication between programs and/or devices.
Includes a shared library, plugins and tools. Developed under GNU license for the open source community. Hosted at SourceForge.net (<http://xsock.sourceforge.net/>)
Technologies: C, C++, Multithreading, Windows and Unix/POSIX IPC (Unix/POSIX API, WinAPI), GNU tools, TCP/IP, Bluetooth, Infrared, Serial/parallel cable, UNIX & Linux shell, SVN, UML (MS Visio)
- 06.2007-09.2007 **Software Developer/Designer** (Summer Trainee) at **Nokia Siemens Networks**, Helsinki, Finland
Nokia MMS Center (Multimedia Messaging Service Center), multinational project team of approx. 60 people
Tasks: MMSC software development (Continuing implementation work from previous summer)
Technologies: TCP/IP, C++, POSIX API (incl. UNIX IPC), Multithreading, UNIX & Linux shell, GNU tools, LDAP, XML/XSLT, UML (MS Visio), **SW development using Agile and Scrum**
- 04.2007-05.2007 **Poznan Supercomputing and Networking Center** (www.psnec.pl), Poznan, Poland
Network Services Department – iTVP project (interactive online streaming system of Polish state television)
Tasks: Software development and monitoring of global broadcasting network
Technologies: TCP/IP, .NET with C#, Multithreading, SQL, UML (MS Visio)
- 07.2006-10.2006 **Software Developer/Designer** (Summer Trainee) at **Nokia**, Helsinki, Finland
Nokia MMS Center (Multimedia Messaging Service Center), multinational project team of approx. 60 people
Tasks: Leading an MMSC software research subproject, later leading its implementation
Technologies: TCP/IP, C++, C, POSIX API (incl. UNIX IPC), Multithreading, UNIX & Linux shell, Informix SQL, LDAP, XML/XSLT, UML (MS Visio), **SW development using Agile and Scrum**
- 05.2006 Design and implementation of a monitor synchronization mechanism in a distributed environment
This project made at the university, is an object oriented C++ library which provides a convenient API to synchronize programs using so called monitors, but in a networked and distributed environment.
Technologies: C++, PVM (Parallel Virtual Machine) library, Multithreaded and distributed POSIX environment
- 04.2006 Display Dumper (DispDump) – a remote control tool which sends content of PC screen through serial cable
My own project released as Open Source at SourceForge.net (<http://dispdump.sourceforge.net>).
Technologies: C, SVN version control system, Low level programming in DOS environment, Directly programming the PC hardware: Serial PC port and VGA graphics card
- 04.2005-02.2006 OpComm – very modular (via plugins), cross-platform, open source on-line group collaboration framework
A team project made at the university as my Bsc Engineer thesis.
Also sample plugins have been created (main window, text chat, VoIP, whiteboard).
My tasks: defining interfaces between modules, designing and implementing program core and network communication components (including own network protocol), creating the plugin mechanism, supporting GUI design and implementation
Technologies: Linux & Windows C++ with multithreading, TCP/IP and GUI (Qt library), CVS
- 10-12.2005 “IntelliService” – a distributed business application for managing company's work assignments
A Windows GUI distributed application, with central database synchronization, made privately for my friend, who needed to manage work assignments of mobile workers in his own company.
Technologies: C++, Borland VCL and WinAPI GUI, MySQL

- 10-12.2005 **"I, Robot" – an autonomous robot** which automatically follows a track on the ground
A team project at Poznan University of Technology
The robot is controlled automatically by a program run either on ATmega microcontroller (on the robot itself) or on a PC (then the robot is connected to the PC with a data cable, and this version program also has to control PC motherboard microchips and data ports like LPT printer port).
My tasks: create all software for the robot, collaborate in mechanical and electronic construction
Technologies: C++ and C (crossplatform: for x86 Intel PC and ATmega), Assembler (PC x86 assembler), Programming the timer, interrupt controller and LPT port in both low level assembler and OS high level API
- 06.2005-10.2005 **Software Developer/Designer** (Summer Trainee) at **Nokia**, Helsinki, Finland
Nokia MMS Center (Multimedia Messaging Service Center), multinational project team of approx. 60 people
Tasks: MMSC software development (SW design, implementation, testing, documenting, tools creation)
Technologies: TCP/IP, C++, C, POSIX API (incl. UNIX IPC), Multithreading, UNIX & Linux shell, Java, Informix SQL, UML (MS Visio), **SW development using Agile and Scrum**
- 2005-2006 **"EMS – Embedded Mini Server" – my own Internet server embedded system**
An embedded system which can be a Web-server or Networked Attached Storage (NAS).
Software code based on my own operating system, but I redesigned the architecture to be more service-oriented and that it fits better in an embedded environment (e.g. it can run many processes on a system with no hardware support for multitasking, like simple microcontrollers).
The system is still under development and will run on a bare x86 PC or my own designed electronic device.
I also created my own TCP/IP stack and networked services (like HTTP or FTP servers).
Technologies: C++, C, Assembler, GNU tools, Own TCP/IP stack, PC hardware, Electronic circuit design
- 2003-2005 **"TOM – Tom's Operating Microsystem" – my own modular operating system for x86 32-bit protected mode**
Made totally from scratch by me (including microkernel, own file system, device drivers, networking etc)
Technologies: C++, C and x86 Assembler, GNU tools, PC hardware
- 05-06.2005 "AudioXLab" – a cross platform, modular framework for DSP with a GUI
Technologies: C++, FLTK library (for GUI), SDL library (for visualisation)
- 04-06.2005 "FreakyWheels" – a cross-platform (Linux and Windows) networked multiplayer 3D racing game engine
An open-source team project made with friends from the university, but made as our own private experiment.
My tasks: defining interfaces between modules, designing and implementing program core and network communication components (including own network protocol).
Technologies: Linux & Windows C++ with multithreading, TCP/IP, OpenGL, GNU tools, CVS version control
- 03-05.2005 "Living things" - a simulation of simple organisms made at Poznan University of Technology
Technologies: MODSIM (object oriented simulation programming language) with gfx visualisation.
- 2005-2006 University courses for web development throughout different semesters
Technologies: HTML, PHP, .NET C#, Java J2EE, SOAP, CSS, JavaScript, AJAX
- 2005-2006 Distributed systems university laboratories - using different distributed OS and programming environment
Technologies: RPC, PVM, MPI, CORBA, Java RMI, COM, XML RPC, .NET C#, Ada, NFS, LDAP, NIS
- 03.2004-06.2006 Databases – university courses with laboratories throughout many semesters, covering different topics
Technologies: SQL and PL/SQL using mainly Oracle, and also SQLite and MySQL
(e.g. triggers, views, materialized views, query optimization, distributed transactions, Oracle GIS Spatial Option)
- 10.2004-02.2005 TCP/IP services made during university laboratories
Linux/POSIX multithreaded TCP/IP services (e.g. an FTP server)
Technologies: C and TCP/IP (POSIX API/BSD sockets), GNU tools, Linux shell
- 10-12.2004 "Snail" – an MS Windows game similar to Snake but with possibility to load .bmp files as game levels (maps)
Technologies: C++, WinAPI, GDI, Borland VCL
- 09-10.2004 Java and Web development for mobile devices – self-learning exercises and experiments, e.g. I created couple of Java applications and webpages for mobile phones.
Technologies: Java J2ME (MIDP), WAP/WML, WAP gateway simulator, Mobile phone simulators
- 07.2004-09.2004 **Software Developer** at **Asta-Net** (www.asta-net.pl), Pila, Poland
Regional cable TV and Internet provider
Tasks: Software development and IT infrastructure development
Technologies: TCP/IP, Delphi, Multithreading, COM, WinAPI, PostgreSQL, PHP, Linux shell, Windows shell
- 01-07.2004 POSIX programs and Linux shell (system tools) – made during university laboratories
Threading, Interprocess Communication (IPC), different types of IO etc., Linux shell utilities
Technologies: C (POSIX API), Linux shell, GNU tools

- 04.2003 A Java GUI application for plotting polynomials
Technologies: Java, using Swing GUI
- 2000-2003 Web development and administration – many self-learning hobby exercises made by me from time to time
Websites (which include e.g. user login system with different levels of access, a guestbook, download systems etc.) websites and useful dynamic webpages (sometimes even in WAP for mobiles)
Technologies: HTML, CGI, PHP, JavaScript, CSS, Apache, IIS, MySQL, PostgreSQL, WAP, WML
- 03-04.2001 Creating the official website of my High School
Technologies: Apache, PHP, MySQL, HTML, CSS, JavaScript, Linux and Windows shell
- 1996-2002 Very intensive and passionate self-learning. Programming in C, C++, Assembler and Pascal/Delphi for DOS and Windows
Many experimental programs and system tools (e.g. FAT file system driver, floppy driver, boot loader etc.), graphical (another Snake game for DOS, a tank game for Windows in DirectX, MMX in assembler etc.) and other GUI applications, e.g. CD Player GUI application, a sound recorder GUI tool, WAVE file visualisation, DTMF (phone tones) sound generator, file management tools, and many more experiments
Technologies: C, C++, x86 Assembler, Pascal, Delphi, DOS API, BIOS, WinAPI, GDI, DirectX, OpenGL

Academic Education

- 2009-2010 **Warsaw School of Economics**, Warsaw, Poland
Top economic university in Central and Eastern Europe
Post graduate studies in Management, faculty of Economical Management
Specialization: **Strategic Management**
Thesis project: "IT project management with the use of eXtreme Programming (XP) methodologies"
- 2006-2007 **Poznan University of Technology**, Poznan, Poland
One of the top technical universities in Poland, with many world-award-winning studies
Master Engineering studies in Computing Science, faculty of Computing Science and Management
Specialization: **Computer Networks and Distributed Systems**
Thesis project: "Cross-platform open source shared library for universal point-to-point communication sockets"
- 2002-2006 **Poznan University of Technology**, Poznan, Poland
One of the top technical universities in Poland, with many world-award-winning studies
Bachelor Engineering studies in Computer Science, faculty of Computing Science and Management
Thesis project: "Cross-platform, open source, online group collaboration system" (a team project)
- Achievements Received the "*Poznan University of Technology Scholarship for Academic Achievements*".
Recorded in "*The Book of Extraordinary Students of the Faculty*" during studies at Poznan University of Technology.

Skills

- Languages Polish mother tongue
English fluent in speech and reading/writing
German intermediate in speech and reading/writing
Russian very basic in speech, good in reading
- Programming C, C++, Assembler, Java, Pascal, Object Pascal/Delphi, Ada, C#, Ruby, UML,
Shell scripts, Lexical tools (AWK, yacc, lex), Expert systems (CLIPS),
Software engineering methodologies and practices, Agile software development, Scrum process,
Different programming methods (e.g. structural, declarative or object oriented programming),
Different levels of abstraction (from microchips through PC applications to kernels and distributed systems)
- Platforms Windows (3.11, 95, 98), NT (4.0, 2000, 2000 Server, XP, Embedded, Server 2003, Vista, 7) - WinAPI, GDI, etc
Unix/POSIX platforms (Linux, FreeBSD, HP-UX, Cygwin/MinGW) - POSIX API, Linux and other specific API's
Cross-platform development, Development of static/dynamic libraries and plugins,
Using cross-platform frameworks and libraries
- User interface Qt, GTK, gtk#, Borland VCL, wxWindows, FLTK, basics of MFC, Console UI (ncurses etc.)
- Embedded/OS **Creating own OS totally from scratch**, Developing embedded systems, Creating device drivers and system tools,
Very advanced low-level programming – both 16bit (DOS, BIOS) and 32bit (386 protected mode, Windows, Linux)
Scheduling, data structures, etc., Distributed OS theory, Basics of real-time systems, Basic signal processing
- Networks/
Communication Designing, programming, testing, protocols, sockets, services, Creating **own TCP/IP stack** in an embedded system,
Network design, configuration, administration and analysis (Windows, Unix/Linux, Cisco, VPN),
Wired and wireless communication technologies (e.g. copper media, fiber optics, Wi-Fi, Bluetooth),
Transmission techniques (coding, framing, synchronizing, error checking and correction, media, bandwidth, delays, etc.),
Telecommunication systems and protocols (ISDN, SS7, GSM, CDMA), Internet by cable TV (DOCSIS)

Parallel/ Distributed	Designing, programming, testing, debugging, multithreaded/parallel and distributed systems and applications, POSIX threads, WinAPI, OpenMP, RPC, PVM, MPI, CORBA, Java RMI, COM, XML RPC, .NET, LDAP Problems, algorithms, environments, Inter-Process Communication
Electronics	Digital circuits design and implementation, Creating own robot, Programming and debugging microprocessors and microcontrollers (Atmel, Intel, Philips)
Web	Development and administration (HTML, CGI, PHP, JavaScript, CSS, SOAP, AJAX, RSS, Apache, IIS), XML development (XML Schemas, XSLT, SAX, DOM)
Mobile	Java MIDP, WAP/WML, Nokia Symbian S80 SDK, Nokia Connectivity Framework, Nokia Mobile Internet Toolkit, Nokia WAP Gateway Simulator, Nokia Mobile Browser Simulator,
Multimedia	Sound, video, 2D and 3D graphics, basics of DSP, Using ready tools (CoolEdit, PaintShop Pro, Adobe Photoshop, etc.) Development (Direct X, SDL library, OpenGL, GDI, DOS SVGA, FFTW library)
Databases	Development and administration (SQL, PL/SQL, Oracle – advanced features, MySQL, PostgreSQL, Sqlite, Informix)
Compilers	Borland C++ Builder, MS Visual Studio 6/.NET/2005 (C++, C#, VisualBasic), Borland/Turbo Pascal, Delphi, GNU gcc, gnat, as, AWK, Yacc, Watcom, TASM, MASM, NASM, disassemblers, MODSIM, PSI/c, CLIPS, and many more
Other	Development of OpenSource projects at www.SourceForge.net , GNU tools (make, autoconf, automake, gdb etc), Version control systems (CVS, SVN, MS Visual SourceSafe, ClearCase), Virtual machines (VMware, MS VirtualPC, VirtualBox, Bochs, QEMU), MS Office (Word, Excel, Access, PowerPoint, Visio, FrontPage, OneNote, Publisher), OpenOffice.org, Google Docs, Building, upgrading, repairing of computers, and many more

References

Jouni Piirainen	Manager at Nokia (mobile phone +358 40 7519378)
Ahmad Qureshi	Director at Tieto (mobile phone +358 50 4872 374)

Interests and hobbies

General technology and engineering, physics, spending time with people, social initiatives, karate, music.

Other skills and competences

Management	Participated in <i>Agile</i> software development and <i>Scrum</i> seminars and trainings (with Ken Schwaber and Craig Larman) and in real software projects using these methods.
Cisco	Cisco Certified Network Associate Course (two semesters in 2005 and 2006)
Since 2004	Driving license.
Since 2002	Member of Mensa society (www.mensa.org) with the IQ (Intelligence Quotient) at least 156 (1% of the population) – the IQ test was limited and could not score more. The criterion for membership in Mensa is a score in the top 2% of the population on any of a number of standardized supervised IQ tests.

I declare, that I agree to have my personal data processed for recruitment purposes in accordance with data protection legislation.

Poznan, November 22nd 2010

Tomasz Lasko