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Contractor - software engineer. Technical achievements highlights:

- **Captive NTFS**: The first free read/write NTFS for free OS. Project included NT reverse engineering.
- **MMS2**: Independent startup business attempt. Coverage by news articles: [1](#), [2](#)

#### Fulltime Jobs

Date	Company	Description
2005/04-11	<b>VA Linux Systems Japan</b>	<b>Linux kernel</b> based development
2004/01-11	<b>Sun Microsystems</b>	<b>Java Enterprise System</b> Quality Assurance (JES QA), technical lead JES components compatibility analysis, automation of QA tasks, JES testing, QA frameworks pilot deployments, architecture and lead of the team projects, team programming guidelines

#### Freelance Commercial Projects

Date	Description
2005	<b>MMS2</b> : Alternative center for cheaper mobile phones multimedia messages (MMS) Web interface was outsourced. Commercial service management held together with JK-Invent. <ul style="list-style-type: none"> <li>• Designed to coexist with existing GSM networks service servers</li> <li>• MMSE/WAP-Push/web/mail convergence featuring smart transformations</li> <li>• Credits charging by ISDN IVR + automatic bank transaction acceptance</li> <li>• Completed mobile phones firmware bugs analysis and workarounds</li> <li>• Free gatewaying program to avoid targetted GSM operators firewalling</li> </ul>
2004	<b>HotelGate</b> : Internet Public Access Gateway Plug&Play TCP/IP for clients, selectively ticketed and/or free access, simplified interface for reception desks, easy management. European facility installations provided by <b>JK Labs</b> .
2002-2003	<b>Captive</b> : The first free NTFS read/write filesystem for GNU/Linux Featured on <b>slashdot</b> . Analysis of portions of 80MB+ i386 disassembly dumps of MS-Windows XP kernel and ntfs.sys for the first binary compatible reimplementaion of the undocumented XP kernel subsystems. Written <b>TraceFS</b> : MS-Windows Kernel API Tracer as native W32 kernel hooking driver for run-time analysis of the NT Cache Manager XP kernel subsystem. UNIX userland of Captive provides GnomeVFS interface to the MS-Windows kernel based MS-Windows filesystem isolated by the CORBA/ORBit interface.

#### Contractor Jobs

Date	Client	Description
2001-2002	<b>Advanced Telecom Services</b>	Mobile technologies <ul style="list-style-type: none"> <li>• MMS framework client and <b>pilot MMS Center debugging</b> via EuroTel GSM operator by technologies GSM MMS, Perl, XML, SOAP</li> <li>• Multimedia EMS support implemented by <b>GSM::SMS patch</b></li> <li>• Implementation of protocol BIP (based on Nokia CIMD2 protocol) for GSM SMS Center direct communication by extending gnokii (<b>external link</b>) for EuroTel GSM operator</li> </ul>

### Contractor Jobs (continued)

Date	Client	Description
1999-2000	<a href="#">SuSE</a>	<a href="#">Partition Surprise</a> : GPLed Partition Magic clone Project was completed as a team work. The code is based on Gnome technologies. As one of the subtasks to keep system bootability I implemented <a href="#">Int13Sniff</a> to ease Microsoft boot loaders disassembly across partition modifications.
2001-2002	<a href="#">ReadyNote</a>	Mobile technologies for embedded devices <ul style="list-style-type: none"> <li>• Debugged gnokii (<a href="#">external link</a>) GSM software modem for Nokia 5190</li> <li>• Port of gnokii and my <a href="#">mdsms</a> (Mobile Device SMS Tool) to embedded uClinux (<a href="#">external link</a>)</li> </ul>
1999-2003	<a href="#">JKLabs</a>	System administration of GNU/Linux and FreeBSD, techsupport: <a href="#">GuestNET</a> , <a href="#">Eclipse</a> , <a href="#">GloboLoop</a> , <a href="#">Fresco</a> Ad hoc technical support challenges such as i386 IRQ redirector, <a href="#">Middleman port</a> (HTTP proxy ported to FreeBSD) or <a href="#">ssht</a> (Intranet accessibility by SSH tunnel).
2001	<a href="#">GTS</a>	<a href="#">tac.plus auth</a> : Cisco TACACS+ NAS host based authorization
1999	<a href="#">Unicom</a>	Technical translations from English
1998-1999	<a href="#">Geoinvest</a>	Mobile technologies, embedded devices <ul style="list-style-type: none"> <li>• <a href="#">332</a>: AmigaOS kernel port to embedded Motorola 68332</li> <li>• Siemens M1 GSM modem daemon for GPS, client/server setup, remote GSM terminals</li> </ul>
1999	<a href="#">TENcom Trade</a>	Mobile technologies <ul style="list-style-type: none"> <li>• <a href="#">MobilDock SMS Tool</a>: SMS communication software for Digital UNIX</li> </ul>
1998	<a href="#">ELSA</a>	<a href="#">STEP</a> : Custom web database application incl. fixes of <a href="#">PHP</a> and <a href="#">PostgreSQL</a> , for <a href="#">ELSA – European Law Students’ Association</a> .
1993-1996	Profes J&K	PC assembly and customer service
1993	<a href="#">Japhila</a>	StampMan: Database application (MS-DOS: Pascal, plainTeX)

For referees e-mails please see: <http://www.jankratochvil.net/resume/>

### Awards

1997	Bronze medal in the International Olympiad in Informatics, South Africa – Cape Town
1997	2nd in an MO-P national contest – mathematics Olympiad, the programming category
1997	1st in the International Competition in Programming
1996	4th in the International Competition in Programming
1995	7th in the Central European Olympiad in Informatics

### Experience Summary

Major Areas	mobile technologies, filesystems, embedded devices
Platforms	GNU/Linux/i386/UNIX/FreeBSD, W32 kernel, Amiga/680x0, MS-DOS, ZX Spectrum, handheld PC-E500S
Languages	C (Gnome/GCC), Perl, bash/awk/sed..., Java, C++, Pascal, Basic, REXX, S-Lang, Foxplus, Prolog
Tools/Metalanguages	autoconf, automake, libtool, m4, CVS, gettext, bison, flex, ld script, gdb script
Assemblers	i386/x86_64, Motorola 680x0, Zilog Z80, Intel 8051, MIPS R2/3000, (Hitachi SH-8)
WWW-Related	HTML/XHTML, CSS, PHP, SQL (PostgreSQL, MySQL), JavaScript, CGI
Documentation	plainTeX, LaTeX, DocBook, DocBook Lite, XML/NS/Schema, gtk-doc, nroff, pod
Libraries	Gnome/GTK+/GLib, POSIX/BSD/SysV/threads/sockets, X11, OpenGL, NCurses, S-Lang, GnomeVFS, libxml, SVGALib, NIS, Qt,...
RPC	CORBA/ORBit, SOAP, WSDL, Sun RPC
Protocols	GSM SMS/PDU/Nokia Smart Messaging/EMS/WAP/WTP/WSP/MMSE/SMIL, WML/AMR/WSP/AMR, GSM ETSI/3GPP stds, IPv4, HTTP, SMTP/RFC822/MIME, FTP, SSH, DHCP, POP3, NFS v2/v3, PPP/LCP/IPCP,...
Filesystems	ext2, FAT, AmigaFFS, ISO-9660