
PERSONAL INFORMATION

CURRICULUM VITAE

Full name: **Tomas JANSTA** Academic title: Ing., Bc. (M.Eng./Dipl.-Ing. Uni., BSc.)
Date of birth: May 28, 1969 Gender: Male Nationality: Czech
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EDUCATION

2005 - 2008: [University of Technology](#) in Brno, Mechanical Engineering, Master's degree in Applied Computer Science and Control Systems, Thesis: "Intelligent sensor network according to the IEEE802.15.4 Standard", passed very well
2003 - 2005: University of Technology in Brno, Mechanical Engineering, Bachelor's degree in Applied Informatics, Thesis: "Design of Data generator for software testing", passed with honour
1990 - 1993: University of Technology in Brno, EEng., German and English advanced courses

EMPLOYMENT HISTORY

2011 - 2011: Senior Software Design Engineer at Honeywell HTS CZ, Automation and Control Solutions; PR: embedded firmware framework design for environmental control devices: radio and user interface test module for FCC certification, integration of ZigBee & WiFi connectivity to SmartGrid utility systems
1995 - 2010: Business and Development Manager at Interko s.r.o., Brno; company activities: multifunction wired and optical networks design & realization, control electronics design and service; PR: business and design engineers team management, contracts negotiations, budget calculations, cooperation with CATV providers, development of network design framework (AutoCAD, SQL, VBA), embedded control applications, wireless and data networks design and applications, industrial electronics
1992 - 1995: IT Manager, Network Engineer at Intercable s.r.o., Brno; PR: software and database tools for multifunction networks design, tools and network reliability control, design team support
1989 - 1992: Junior Engineer at Medical Technology Research Institute, Brno; PR: design of lab tools and electronic prototypes for the Autonomous Lithotripter project, computer and database administrator
1987 - 1989: Computer Engineer and Database Programmer at Kancelarske stroje a.s., development of the control system project for Nuclear Power Plant at Temelín; PR: PC AT dBase implementation and connectivity to mainframe computer and administration, computer hardware technician

INTERNATIONAL EXPERIENCE

2002 - 2007: Industrial electronics field support at Agriculture Research Institute in Vienna, Austria; PR: industrial appliances repair service, reverse engineering, quality control, failure analysis and control
2001: Corporate wireless network optimization and management at Contour Aerospace Inc., Brea, CA, USA; PR: management of wireless and wired network integration, testing and failure analysis

BUSINESS EXPERIENCE

1995 - 2010: Co-founder, Business and Technology Manager at Interko s.r.o. (LLC), Brno
1991 - 1996: Small business, consumer and industrial electronics development and repair service, freelance programmer (TPascal, TC, dBase, MCU), Consultant and developer of applications with IA32 based PCs, international computer parts business with partners in Asia

(PR = personal responsibilities)

PROJECTS

- Multifunction networks design and realization (cca 500000 connected subscribers in Czech republic)
- Embedded industrial electronics design and repair, Control real-time low-power MCU applications
- Software for embedded radio connectivity (ZigBee/SmartGrid), LAN/WLAN installation and administration
- Computer international trade business, local distribution, computer production and administration

PERSONAL PROFILE

Languages knowledge: Czech native; assesment according to Common European Framework of Reference level:

	Understanding		Speaking		Writing
	Listening	Reading	Interaction	Production	
English	C2	C2	B2	B2	B2
German	C1	C1	B1	B1	B1

Personality: [INTJ](#) (Introverted iNtuitive Thinking Judging, "Mastermind") Myers-Briggs Type Indicator

Soft skills: analytical, complex and critical thinking (pro-active, innovative, researching attitude with desire to experiment, respecting the priorities, assertive), user of persistent visual memory, quick learner, mentor, team player by nature, bright assessments, quick estimations, wise decisions

Work skills: analytic and diagnostic approach to achieving results with sense to improvisations; competent to plan, document and maintain a reliable workflow, specify and manage production process

Hobbies: open air sports, motorcycle racing, weak-signal radiocommunications, computer and guitar music, digital processing, photography, astronomy, chinese medicine, graphology, chemistry

PROFESSIONAL SKILLS AND AREAS OF EXPERTISE

- System analysis, RF-Mixed-signal circuits simulation (PSPice, Simulink, MWO), design and prototyping
- Circuit and Tolerance Analysis in electronics and mechanics, design to follow six-sigma rules
- Automated and manual hardware/software testing and verification, T&M failure and error diagnosis
- Familiar with A/D sensor interfaces, Antennas, RF matching circuits, Transmission lines, Smith tools
- Wired, optical and wireless networks (catv & data) design and realization with service providers
- Electronic components selection and recommendation, SMT layout, PCB circuits for RF/microwave
- Troubleshooting analysis and problem resolving without vendor's documentation, Reverse engineering
- Embedded software design using rapid development methods, Real-time control, Digital signal processing
- Production cycle process (lean, scrum, agile, RAD, Kanban) management knowledge

Technology experience in: analog, digital, high-frequency and RF-wireless lab testing and measurement, EMC guidelines, PCB layout & prototyping, high-voltage circuits (x-ray medical); distribution networks (CATV) components, Networking protocols (PHY, routing, 802.x.y MAC, TCP/IP, Novell), Wireless Sensor networks (IEEE802.x, Zigbee); buses: USB, I²C, CAN, EIA232, EIA485, ProfiBUS, PCI, 1wire; automotive OBD/II, ECU

Software development experience in: ANSI C, C++, C#, nesC, Python, VBasic, Pascal, SQL, Java J2EE, PHP, VHDL, UML, assembler: ARM AVR MSP430 x86 MCS51 Z80; Linux Zshell, user mode, kernel drivers; Version control systems GIT, Subversion, CVS, project management in JIRA

Software Tools: GCC toolchain, IAR-EWB for AVR/ARM/MSP430, CadSoft Eagle PCB, NI Multisim/LabView, MicroCap PSPice, AWR Microwave Office, GIT, SVN, AutoCAD, Matlab/Simulink, TI CCS, AVR Studio, Borland C++ Builder, Delphi, VisualBasic (VBA), VisualStudio 2008 C++ .NET, (MS/Open)Office, OpenOCD, Agilent VEE, Metrowerks Codewarrior, Eclipse CDE, EnterpriseArchitect UML, JIRA, iptables firewall, Wireshark

Hardware Tools: proficient with mixed-signal lab tools, Agilent/Tek oscilloscopes, RF vector/spectrum/logic analyzers, RF power detectors, RF VSWR meters, debuggers, dataloggers, power supplies

Platforms: MCU: ARM v4/v7-CortexM0/3/4, TI MSP430, ADI 16/32bit DSPs, Atmel AVR, intel MCS51, IA32(x86), Freescale HCS08+DSC, Zilog Z80; Xilinx CPLD; broadband metallic/optical distribution network and RF/microwave building blocks; LCD modules, HMI, Siemens SIMOTION P350

OpSystems: MS Windows, Linux 2.6.xx, TinyOS(AVR/MSP430), FreeRTOS(CM3), Contiki(AVR), Linux embed.

Standards: EN 50110-1 (Act50/78 §7/10), IEC 61508, IEEE802.11, IEEE802.15.4, IEEE1149.1 JTAG, ZigBee

Certifications: Certificate of Professional Qualification according to Act 50/1978, §7 for qualified operations on electrical equipment below 1kV, GreenBelt for Six-sigma design training, Siemens SIMOTION control

Licenses: Driver's license A+B, US FCC Extra class RA Service License AD6XP callsign