

## Curriculum vitae of Jenó VARGA

Telephone: +36.30.6810.958  
E-mail: [jenov.jobs@gmail.com](mailto:jenov.jobs@gmail.com)



### Personal Details:

Name: Jenó **VARGA**  
Marital status: Married (two children)  
Nationality: Hungarian and British  
Driving license: Full, clean, current

### Qualifications:

1985-1990 MSc in Electrical Engineering: Technical University of Budapest, Hungary.  
1980-1984 Hungarian equivalent of the 'A' Level – Mathematics, Physics, Electronics.

### Career History:

Present November 2004	<b>Digital Doctor Ltd.</b> <a href="http://www.ddr.hu/en/">http://www.ddr.hu/en/</a> Managing Director, consultant.	Csolnok, Hungary
September 2012 September 2011	<b>77 Elektronika Ltd.</b> Deputy Head of R&D	Budapest, Hungary
Jun 2011 April 2011	<b>Cognex Corporation</b> <a href="http://www.cognex.com">http://www.cognex.com</a> Principle Electrical Engineer.	Budapest, Hungary
August 2009 April 2007	<b>LogicPD</b> <a href="http://www.logicpd.com/">http://www.logicpd.com/</a> Office manager, System and HW Engineer, Project Manager.	Budapest, Hungary
August 2004 September 1999	<b>Sun Microsystems</b> <a href="http://www.sun.com/">http://www.sun.com/</a> System, Hardware Development Engineer, Lead Engineer, Project Manager.	Camberley, England
August 1999 February 1996	<b>Mitsubishi Electric, Apricot Ltd.</b> Hardware Development Engineer	Birmingham, England
April 1995 January 1993	<b>ASK Ltd.</b> Senior Development Engineer, Client Support Engineer.	Budapest, Hungary
December 1992 January 1991	<b>HNS Ltd.</b> Hardware, Software Development Engineer.	Budapest, Hungary

### Language skills:

- ✓ Hungarian: native language.
- ✓ English: fluent.

### Achievements summary:

- ✓ Problem solving: designed, brought-up, debugged, verified, productized many boards and systems; successfully negotiated technical, business and human issues.
- ✓ Quick learning/adaptation: managed to integrate quickly to new environments; learnt new skills, tools, technologies; interested in *new ways*, but can understand traditions as well.
- ✓ Independent and team player: worked independently (can organize myself, keep dead-lines, plan ahead); successfully lead small/medium size (2-30) teams but also worked as a team member.
- ✓ Managed to work efficiently under pressure.
- ✓ Mentored junior engineers, external team members and project managers.
- ✓ Managed small design office, R&D office with multi-million (US\$) annual budget, partnered in start-ups.

## Skills, experience summary

### Trainings:

- ◆ Sun Sigma internal quality training at Sun, UK.
- ◆ Team management training at Sun, UK.
- ◆ Advanced Signal Integrity Principles by Edward P. Sayre at Oxford University, UK.

### Management:

- ◆ Set-up and manage start-ups and small design office.
- ◆ Management of 2-30 engineers, group managers and other supporting staff.
- ◆ Technical lead of 4-8 international engineers.
- ◆ Manage project, liaise and negotiate at local and international level.

### System Development:

- ◆ Intel's Atom (Z5xx) based SOM definition and development.
- ◆ Linux based systems definition, development:  
<http://www.ddr.hu/en/xts> ; <http://www.ddr.hu/en/webtc>
- ◆ Ethernet based networks, server subsystems development and implementation.
- ◆ Turn key solutions from requirement collection through development to after-sale support.
- ◆ Verification platform development for a new generation processor <http://www.sun.com/servers/coolthreads/> collected requirements, wrote system specification, “sold” the plan for the international development team and lead the implementation.
- ◆ System level development of an HD64180 microprocessor based industrial control system, including system bus specification, card set definition, power subsystem definition.

### Hardware Development:

- ◆ 8-64 bits processor based boards design (Intel's Atom and Pentium family P1-P4, Sun's UltraSparc II-III, HD64180, INMOS Transputer's T400-800 and many more): from specification through schematic design to bring-up, verification, introduction to manufacturing.
- ◆ High-speed digital boards, subsystems development.
- ◆ Design with high speed serial and parallel bus architectures: PCI-Express, PCI-X, SCSI, SAS, USB, AGP/GTL/DTL, D/S/F/SD/DDR/DDR2-RAM, etc.
- ◆ Low power embedded system development.
- ◆ Analogue subsystems embedded into high-speed digital system.
- ◆ Multi-phase switching and analogue power supplies, power subsystems development.
- ◆ Signal integrity (SI) theory and design principles, digital circuit's pre- and post layout simulation.
- ◆ Design for EMC, ESD, NEBS compliance.

### Software Development:

- ◆ Script (bash) level programming in Linux environment.
- ◆ Coreboot porting to Atom based system.
- ◆ C and assembly program development in embedded and open systems.
- ◆ End user, test and utility applications development: DOS, Windows and Linux.

### Other:

- ◆ System administration: Linux and Windows.
- ◆ International work experience (England, Germany, USA, Taiwan, etc.).
- ◆ Liaison with clients, suppliers and partners at international level.
- ◆ CAD tools: Allegro, PADS, PCAD, Veribest, OrCAD, Altium.
- ◆ Productivity tools: OpenOffice, Microsoft Office, Email clients, Project Planner, etc.
- ◆ CVS, SVN, Mantis administrator and developer level.

## Career History

Nov. 2004 –: Digital Doctor Ltd. ([www.ddr.hu](http://www.ddr.hu)), Csolnok, Hungary

**Position:** Managing Director, Consultant, EE

**Projects:**

- Consulting Invenshure.com: cloud based SW development.
- Consulting Exocite.com: Atmel micro based modules for sensors connecting to Exosite system. Definition, components selection and schematic design.
- Consulting SteadyStateImaging.com: HW requirement specification for SWIFT MRI.
- Atmel micro based touch controller definition and design.
- Coreboot porting to Intel's Atom based platform.
- XTS: Terminal Server/Client project ( <http://www.DDr.hu/en/xts/> ): system specification, development, debug and testing.
- WebTC: ( <http://www.DDr.hu/en/webtc/> ) Mozilla-Firefox based web client project: system specification, development, debug and testing.

Sept. 2011 – Sept. 2012: 77 Elektronika Ltd. ([www.e77.hu](http://www.e77.hu)), Budapest, Hungary

**Position:** Deputy Head of R&D

**Projects:**

- Lead the multi million (US\$) annual budget R&D team with two other managers (70+ staff)
- LabUMat 2: project manager of automatic pipetting system for urine chemical analyser
- New generation analyser: project manager and system architect

Apr. 2011 – Jun. 2011: Cognex Corporation ([www.cognex.com](http://www.cognex.com)), Budapest, Hungary

**Position:** Principle Electrical Engineer

**Projects:**

- Setup hardware development locally
- Support firmware development for TI's DSP code
- LED driver board design
- PIC based firmware development for power management application

Apr. 2007 – Aug. 2009: Logic Product Development ([www.logicpd.com](http://www.logicpd.com)), Budapest, Hungary

**Position:** Office Manager, System/HW/Lead Designer, Project Manager

**Projects:**

- LPDX86: Intel's Atom (Menlow chipset) based SOM and development kit: system specification; project lead engineer; SOM schematic design; SW/HW bringup, debug and design verification
- Budapest design office management: day to day office operation; office projects support and supervision; performance reviews

**Achievements:**

- LPDX86 SOM alpha design was issue free (close to final release): system was running Linux OS after initial BIOS bugs fixed
- Successful BIOS development support and debug
- Kept the development team, under my supervision, together during difficult times.

Sep. 1999 – Aug. 2004: Sun Microsystems Ltd ([www.sun.com](http://www.sun.com)), Camberley, UK

**Position:** Senior System/Board Design Engineer, Team Leader

**Projects:**

- Niagara CPU bring-up platform: 8 core 32 threads latest generation CPU bring-up and verification platform (system architect/engineer, lead engineer): system specification, system design, PCI-Express, PCI-X, DDR2 SDRAM, JBUS.
- 12P/12U midrange server: 12 processors (UltraSparcIII, 1050MHz) based system and board design (lead design engineer): boards specification, Ultra160 SCSI, PCI 2.1 at 66MHz, Gigabit Ethernet and I2C based environment monitoring and system control design, PCB, SI, EMC, DFM, bring up, debug, DVT work.
- 1P/1U entry server: 1 processor (UltraSparcII, 450MHz) based board design (consulting/design engineer): schematic and PCB design review, consulting, bring up, DVT work; SDRAM PC100, Ultra2 SCSI, 10/100 Mb Ethernet, I2C, USB 1.0, IDE, DC/DC.
- 8P FT server: 8 processors (UltraSparcII, 300MHz) based fault tolerant system specification, simulation work (support engineer): PCI bus simulation, HW specification.

**Achievements:**

- System concept and specification in two month
- Designed nine boards for the 12P system; 'right first time'
- Achieved quick bring up time on the 12P boards
- Designed boards passed commercial EMC/ESD and NEBS requirement
- Specified a new fan interface
- Debug an SI issue on the PCI subsystem and implement an optimal fix
- Introduced two new starter (design engineers) to the project and the working environment
- Managed to keep good working relation with other teams even under pressure
- Sourced and used advanced diagnostic equipment and tools

Feb.1996 – Aug.1999: Mitsubishi Electric Motherboard Div. (R&D), Birmingham, UK

**Position:** Senior Electronics Design Engineer

**Projects:**

- Motherboard design, debug, production support: MR810 Mini NLX Intel 810 Chipset, PCI/ISA, 10/100 LAN, PC100 SDRAM, AC97 PCI audio, USB
- Motherboard design, debug, production support: HN440 ATX Pentium II 440BX, PCI/ISA, AGP 2x video, PCI audio, PC100 SDRAM, USB
- Co.-design of Pentium MMX based motherboards: audio circuit design, debug boards, front-panel design.
- Foghorn security card design on LPX riser extension: based on COP8 micro controller. Circuit, software interface to application program and firmware design, board debug.

**Achievements:**

- The first revision of my motherboards were very close to the production one (error free) so we could send them to customers for evaluation (short time to market). HN440 revision A was booting Windows off the pre-production line.
- Found Intel specification problem in their new PPGA CPU circuit.
- Fixed the PC100 SDRAM stability problem on MR810.
- Designed and lead the PCB implementation of a few very quiet audio circuit (low noise level) on high-speed digital board.
- Pioneered the usage of a few advanced features of our new CAD system (Veribest): signal analyzer, new project creation, library definition, design rule usage.
- Written application program for the CAD system to easier design rule specification and IBIS model usage.
- Both my motherboard design passed RFI tests from revision A.

Jan. 1993 – Apr. 1995: Ask Ltd., Budapest, Hungary (small design house)

**Position:** Development Engineer, Chief Engineer

**Projects:**

- Managed a team of seven to redesign a medical lab instrument (Seditron) used for sediment analyzes based on image recognition and precise motion control
- Redesigned the master card (video digitizer and main controller), the control board of the robotics microscope and the communication interface
- Senior technical contact for our German customer (Boehringer Mannheim).
- European installation and service of our design

**Achievements:**

- Increased the reliability of Seditron Master card by redesigning the DMA engine and memory subsystem
- Designed a diagnostic software and lead the realization.
- Repaired many system on site under high pressure (at different European location: Germany, Switzerland, Spain, Hungary).
- My team have built the first 40 pre-production system under high pressure and very tight schedule.

Apr. 1991 – Dec. 1992: HNS Technical Development Co., Budapest, Hungary (small design house)

**Position:** Hardware and software development engineer

**Projects:**

- Development of a new (HD64180 based) PLC system: system bus specification, card design (circuit and PCB), system debugging and application program development.
- HD64180 based PLC system and cards design
- Application programs: adaptive wiring tester for washing machine, temperature profile controllable thermostat tester. Source code in C, using the real-time, multitasking operation system of the PLC.

**Achievements:**

- Defined a flexible system bus for the PLC.
- Written a PID algorithm for the thermostat tester, where user could specify the temperature profile