Curriculum Vitae

Personal Data

Name:	**PERLAKI, Attila**
Date of birth:	04/01/1968
Sex:	Male
Nationality:	Hungarian
Languages:	Hungarian (native) English (intermediate) level 7/10
Marital status:	Single
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Education

2008-2011	University of Miskolc Hatvany József Doctoral School of Information Science, Engineering and Technology Significant courses: Discrete Mathematics, Exact and Approximate Methods of Search, Intelligent Data Base Systems, Knowledge Storing and Reasoning Methods in Expert Systems
1993-1998	University of Miskolc MSc in Information Engineering Significant courses: C/C++, Software Engineering, RDBMS, Internet Protocols & Servers, Operating Systems (UNIX, NT), Telecommunication, System Analysis & Design, Applied Laser Technology, AI, CAD/CAM Products and Usage
1989-1991	University of Miskolc, BSc in Measurement and Automatization Significant courses: VLSI Technology, Hardware Design, Industrial Measuring Systems, Embedded Systems (MCU, DSP), Assemblies, Control Engineering, Realtime & Fault Tolerance Systems
1987-1989	Technical College, Gyõr, 4 semesters in Telecommunication Significant courses: Digital & Analogue Circuits, Telephone Systems, Routing Technologies
1982-1986	Technical School, Miskolc, Transport Organisation Significant courses: Dispatcher Systems, Controlling of City/Country Wide Systems

Professional course

1996	ESPPE '96. European School of Parallel Programming Environment L'Alpe d'Huez, France

Experiences

Code languages:	Java/JSP/javascript	10 years
	Assembly (Z80,Motorola 68008)	8 years
	C/C++ (under UNIX systems)	11 years
	SQL (Oracle,mysql,PostgresSQL):	6 years
	HTML/XML:	10 years
	SVG:	1 year
Operating Systems:	UNIX (mainly Linux, as root)	14 years
	Windows (from 3.1x to XP, as user)	10 years
Applications:	CAD in Electronics, DTP, Multimedia applications, SQL DBS, TCP/IP, web servers (Apache with CGI/SSI & Java servlet)	
Hardware:	PC, embedded systems (MCU,DSP), FPGA, system design	

Work experience

2005-2011	University of Miskolc, Developer, IT Advisor
2004-2005	Infobanya Ltd., Developer
2003	Lufthansa Systems Ltd., System Engineer
2002	Evosoft GmbH, System Engineer
2001	Innovative Ideas Oy, R&D Engineer
2000-2001	Sonera SmartTrust Oy, Consultant
1999-2000	Lufthansa Systems Ltd., System Engineer
1997-1999	University of Miskolc, Software engineer at the Computer Center
1992-1994	University of Miskolc, Teacher assistant at the Dep. of Control Engineering
1990-1992	University of Miskolc, Laboratory assistant at the Dep. of Control Engineering
1991-1992	Miskolc Transport Co., Programmer at the Computer Center and Engineer assistant at the Dep. of Development
1989-1990	Miskolc Transport Co., Engineer assistant at the Dep. of Development
1986-1989	Miskolc Transport Co., Computer operator at the Dep. of Management and Terminal dispatcher at the Dep. of Transportation

Jobs, Projects

Project:	New IT Infrastucture at the Library of University of Miskolc
Time:	Jan.2010 - Jun.2011
Organization:	University of Miskolc
Country:	Hungary
Position:	System Engineer
Task:	Hardware and Software Specification, System Administration
Tools:	Linux (Debian), C++, Java, SQL, scripts
Description:	The base of the new IT infrastructure is a Dell PowerEdge rack server (6 units). It serves the new library system, the new repository (MIDRA V2), an other additional services, virtual machines.

Project:	DART-Europe E-theses Portal
Time:	from Nov.2008
Organization:	University Collage London, DART-Europe
Country:	UK, Hungary
Position:	Represenative of University of Miskolc
Task:	Coordination
Description:	Each partner organisation may nominate one representative to serve on the DARTEurope Board.

Project:	MIDRA Repository (V1)
Time:	Nov.2005 - May.2007 + 3 year support
Organization:	University of Miskolc
Country:	Hungary
Position:	Developer
Task:	Objects design, servers, clients implementation, tools
Tools:	Java (applet, servlet, JSP), SQL, XML, XSL
Description:	The MIDRA Repository based on eleMEK application package extended with import and export of local data formats and specialised search requirements.

Project:	Modular Library System for Digital Documents (eleMEK)
Time:	Jan.2004 - Jul.2004 + 1 year support
Organization:	National Information Infrastructure Development Program
Country:	Hungary
Position:	Developer
Task:	Objects design, servers, clients implementation, tools, GUI
Tools:	Java (applet, servlet, JSP), SQL, XML, XSL
Description:	The eleMEK is a platform-independent system based upon the experiences gained by the development of the Hungarian Electronic Library V2.0 (http://www.elib.hu). It can be use to any digital archive which consist of individual documents, supporting them with metadata standards (Dublin Core, USMARC, OAI) and a configurable XML based file structure.

Project:	Genie HTTP/XML transactions for Pannon GSM
Time:	Sep.2003 - Dec.2003
Organization:	Lufthansa Systems Ltd.
Country:	Hungary
Position:	System Engineer
Task:	multitask sender/receiver under HTTP 1.0/1.1
Tools:	C++, XML, CVS, JSP
Description:	The goal was a quick sender/receiver which works between the queue of Core and the WWW. It can solve 120 (short) message per seconds via HTTP. Test pages is written in JSP.

Project:	Outsource project for Siemens
Time:	Apr.2002 - Aug.2002
Organization:	Evosoft GmbH
Country:	Germany
Position:	System Engineer
Task:	XML/DB server, JSP based User Interface
Tools:	RCS, Java, JSP, XML
Description:	This product has been made for a e-Businnes project of Siemens, based on a multiplied database server and communication with XML messages. Its source is written in Java. User pages is written in JSP under Struts.

Project:	Outsource project for Nokia
Time:	Apr.2001 - Jul.2001
Organization:	Nokia
Country:	Finland
Position:	Software Engineer
Task:	Adding new features
Tools:	CVS, C, Java, XML, sh
Description:	This product has been made for a WAP related project of Nokia Networks, based on XML technology and its source is written in C and Java.

Project:	Install Tool
Time:	Jan.2001
Organization:	Sonera SmartTrust Oy
Country:	Finland

Position:	Consultant
Task:	Implementing
Tools:	CVS, sh, m4/autoconf
Description:	It was made for a Sonera SmartTrust product, consisted of the basic features of a general installation: detecting the environment and the previous (complete or incomplete) installations, handling dependencies, handling the default values with possibility of modifications by user, unpacking files and setting up the configuration files.

Project:	SJB/DB Tool
Time:	Sep.2000 - Dec.2000
Organization:	Sonera SmartTrust Oy
Country:	Finland
Position:	Consultant
Task:	Designing and Implementing
Tools:	CVS, Oracle/Postgres, Java + ODBC/JDBC, sh
Description:	SJB (Security Journal Browser) and DB (General Database Browser) Tools are a user friendly interface for users, searching and summarizing selected data without SQL knowledge. Our team made a platform independent tool and an additional GUI for non-batch using. (It concerned to the special company requests.)

Project:	MQ Tool
Time:	Jun.2000 - Aug.2000
Organization:	Sonera SmartTrust Oy
Country:	Finland
Position:	Consultant
Task:	Designing and Implementing
Tools:	CVS, MQSeries, Java, sh
Description:	MQ Tool is a tester and viewer application for message queue communication based interprocess systems. Our team made a platform independent tool to analyse and check the data transport in the queues and log & dump the selected details. (It concerned to the special company requests.)

Project:	Y2K (Storm)
Time:	Apr.1999 - Oct.1999
Organization:	Lufthansa Systems Hungary
Country:	Hungary and Germany
Position:	Programmer
Task:	Analysis and patching
Tools:	ClearCase, Sniff, SQL, C++, Tcl/Tk, bash under Solaris
Description:	The Storm is a controlling system of aircraft for short (3 days) and long (28 days) time scheduling. It serves different sections of the airport staffs via an Oracle database; mainframe connects and telex reports. Our team checked and fixed the Y2K problems in the source code.

Project:	Windows Based Parallel Computing named WINPAR Esprit Project: 23516 Work Program Task: 6.9
Time:	Oct.1997 - Oct.1998
Organization:	WINPAR consortium (EU Project)
Country:	Hungary
Position:	Coordinator of WMPI/WPVM team
Task:	Researching of enhanced message passing methods Controlling of documentation works
Tools:	Winpar developer kit under Windows NT and Linux
Description:	The goal is to develop an integrated software development environment for parallel computing targeting a new class of parallel computers: personal computers interconnected by local area networks running Windows NT. The work is based on existing state-of-the-art software, which is integrated and ported to Windows NT. In this process major parts of the software is re-engineered which opens potentials for using modern and flexible software engineering technologies and thus good commercial perspectives for the end-product: the WINPAR Software Development Environment.

Project:	WWW Based Information System with SQL named SPOT. PHARE HU-94.05 0101-L023/61
Time:	Jun.1997 - Jan.1998
Organization:	University of Miskolc, Faculty of Mechanical Engineering
Country:	Hungary
Position:	Developer
Tasks:	Designing of the structure of the information system Designing and making of the GUI Specifying and installation of software component for server Making of a special search engine for the system Filling of the database of subjects
Tools:	C, bash, HTTP/SSI, MiniSQL under Linux
Description:	The SPOT has been made for solving three requirements. The first one is an "easy to use" database service of compulsory, special and optional subjects by field of study, time of study, lecturer, etc. for students. The second one is a database of senior students by main subject, field of research and range of interest for prospective employers. The third one is a database of companies for prospective employees. The system has been enhanced with a thematically list of research projects of departments for students and companies.

Project:	Miskolc HP. Developing a WWW and CD-ROM Based Information System with Multimedia.
Time:	May.1997 - Aug.1997
Organization:	Town Hall of Miskolc
Country:	Hungary
Position:	Multimedia Expert
Task:	Setting up hardware and software elements of editor system Selecting and editing of the incoming video documents Making of thematically hypertext pages with audio/video clips Writing of a manual about editing
Tools:	HTML, Media Studio under Windows 3.1, FPS-60 videgrabber card
Description:	The CD and the web site have been made to introduce Miskolc to the world. It consists of information about the statistical data, history, tourist guidance, etc. of the city. It based on HTML because of platform independence.

Project:	Teaching
Time:	Jan.1997 - Dec.1998
Organization:	ComTrans Ltd.
Country:	Hungary
Position:	Teacher
Task:	Heading of courses
Tools:	Internet accessories, Windows NT, Linux
Description:	Headed courses by subject: Internet for Beginners (How to navigate on the Internet) HTML 3.2 (requirements, tools, syntax and style) UNIX for Users (from login to simple shell scripts) Linux for Advanced Users (installation and maintenance)

Project:	Internet Knowledge for Everyone
Time:	Aug.1996 - Feb.1999
Organization:	National Informatics Infrastructure Developing Program
Country:	Hungary
Position:	Internet Expert
Task:	Writing textbooks and delivering lectures about Internet
Tools:	Internet accessories, Linux
Description:	*How to Make Your Own WWW Page?* Textbook. (56 pages.) ISBN 963 02 9998 4, NIIF 1996. This book is written for beginners and passive netsurfers. It introduces the HTML and the arts of designing of pages. Chapters: Conditions, The First Page, Texts, Images, Links, Structure of a

Web Site, UNIX for DOS Users, Extra Elements, HTML Tomorrow, Appendices.

How to Make Effective Homepage? Lecture.
Lectured in Regional Communication Nets Conference in 1996.
The topic of the lecture was the questions of homepage developing. The parts of lecture: Environments of Networking, Purport of the Page, Design of the Page, Personal Conditions.

WWW Search Engines. Article. Infopen 1997/4
Openinfo Publisher Ltd.
The topic of the article was the effective methods of searching by keywords and using the popular search engines in the Web. The second part of the article gave short description of search languages and statistics.

Project:	UNIX System Administrating of the Internet server of the Central Library
Time:	Apr.1996 - Dec.1998
Organization:	University of Miskolc, Central Library
Country:	Hungary
Position:	System Administrator
Task:	Building of a PC from elements Installing of Linux as an Internet server Maintenance
Tools:	Linux Developers Kit
Description:	This work was a normal system administration task with operates web & FTP server, mail groups, NFS and local users.

Project:	Hungarian Electronic Library ("MEK")
Time:	Oct.1995 - Feb.1999
Organization:	National Information Infrastructure Development Program
Country:	Hungary
Position:	Editor and Technical Assistant
Task:	Editing of the "MEK" Internet site Making of interactive pages and their servers Making of a special version for Internet Expo 1996 Maintenance
Tools:	HTML, Gopher+, Bash, C under Solaris and Linux
Description:	The Hungarian Electronic Library is a public non-stop accessible collection of text documents from literary and poem to scientific and technical books and articles in Hungarian language for Internet users anywhere in the world. The first version of the library based on the Gopher system. Collecting thousands of public electronic documents the editorial staff decided the web upgrade with keeping the original system. In that time the site run under Gopher+ with more virtual entrance. (At present it runs under httpd.)

Project:	Internet Using for the Blind
Time:	Jun.1995 - Feb.1996
Organization:	University of Miskolc, Central Library
Country:	Hungary
Position:	Developer
Task:	Designing of the draft of the systems Making of a prototype
Tools:	C, Gopher+, voice interface under Solaris
Description:	Developing an Internet Based Information Interface for the Blind the Gopher seemed to be an ideal base. The Gopher is a special database of texts and reading of the text with a voice system is a known method. The navigation in the Gopher is very simple with arrow keys, so that "user interface" applicable to a numeric set. An ordinary phone consists of that "input interface" and it is perfect for voice output, too. For this service the provider can use a hardware interface between server machine and phone system and a software interface between the Gopher server and the voice system driver.

"Robotgopher". (Internet Using for the Blind) Lectures.

Lectured in Regional Communication Nets Conference in 1995.
The theme of the lecture was the navigation on the Net for the Blind. What are the way of it and where the devices of it are accessible? Which new ways and devices of it can be developed? How this media can be made available for the Blind?

Project:	Internet Site for the University of Miskolc
Time:	Dec.1993 - Jan.1999
Organization:	University of Miskolc, Computer Center
Country:	Hungary
Position:	Editor and Technical Assistant
Task:	Editing Making of interactive pages and their servers Maintenance Training of users
Tools:	HTTP, Gopher, FTP servers, C, bash under Solaris, AIX, Linux
Description:	The goal was a flexible frame of all information of the university for everyone. The editorial staff worked out a thematically structure and based it on Gopher in the first version. In the next years dozens of Internet sites joined to the system. Later it has been migrated under HTTP.

Project:	Heading of Computer and Microprocessor Laboratory
Time:	Sep.1990 - May.1994
Organization:	University of Miskolc, Department of Control Engineering
Country:	Hungary
Position:	Demonstrator as a Student (1990-1991) Teacher Assistant as an Engineer
Task:	Heading practices and delivering lectures Developing CPU and PC based controlling systems Researching of intelligent measuring systems Writing textbook
Tools:	C/C++, Intel assemblies, CAD for electronics, DOS, UNIX
Description:	Practices and lectures by subject: Computer Hardware Basics, Control Engineering, CPUs, Embedded Systems, Dedicated Microprocessors, Programming in C, Digital Electronics, Remote Data Processing, Transputers, Digital Signal Processing

Using QuickC for Windows. Textbook (192 pages).
ISBN 963 577 120 7, LSI 1994
This book is written for C programmer students. It introduces programming under Windows 3.x environment and the QuickC developing system.

Project:	Dispatcher System for Public Transportation
Time:	Feb.1989 - Jun.1993, Jan.1998 - Jun.1998 (more versions)
Organization:	Miskolc Transportation Company, Department of Development
Country:	Hungary
Position:	Developer
Task:	Designing and implementing of hardware and software of the system
Tools:	CAD, Zilog assembly, C/C++, Clipper under DOS
Description:	"INDI" (Computer Based Dispatcher System for Public Transportation Terminals) Hardware and Software. Applied in Miskolc Transport Company since 1992. The "INDI" was made for Miskolc Transportation Company to automate the staff's work of terminal. The system contains traffic control, passenger information and terminal supervisor functions. The company tested it in practice and established that one person can control all the work of the terminal. The applying has begun in two reference places in 1992. In 1996 it has been installed in five of the seven terminals. Versions: 1989: Z80 based card for outer terminals (maximum 2 lines) which work without human touching. 1991: Demo of a PC based terminal system for inner terminals (maximum 16/32 lines of bus) with user interface in C. 1992: First installation with hardware interface for terminal traffic lights and communication interface for the VISINFORM travelers' information tables. Updated the program with these

supports.
1993: A new type outer terminal system with i8052, programmed in assembler, C and the data pre- and postprocessing programs in Clipper. Updated the inner terminal systems with TSR routines.
1998: Internet based communication and new GUI with Java for the extended system for terminals.

Project:	CPU Tutorial Software
Time:	Sep.1990 - Jun.1991
Organization:	University of Miskolc, Department of Control Engineering
Country:	Hungary
Position:	Developer as a Student
Task:	Designing of the software structure Programming the half part of code
Tools:	C, Zilog assembler under DOS
Description:	*i8080 CPU Tutorial Software.* Diploma work for Hungarian B.Sc. (3 years) degree (36+77 pages). Winner of competition of "Excellent Diploma Work" Foundation in 1991. The i8080 CPU Tutorial Software was made for CPU Technology subject of the Department of Control Engineering in the University of Miskolc. The aim was to develop a full compatible and compact software simulator of i8080 microprocessor for programmer students on PC/286. The program demonstrates the working of microprocessor step-by-step in the programmer's point of view. It is suitable for self-learning and developing and debugging i8080 programs. The department applied in education between 1991-1994.

Publications & References:

2011	Lexeme-net Descriptors with JSON Datastructure. Lecture. Lectured in PhD Forum 2011 Conference.
2010	Preprocessing Low Structured and Erroneous Text Sources. Article. in ISBN 978 963 06 9289 2, ICCC 2011. Cost Analysis of Nearest Neighbor Search with HP Tree. Lecture. Lectured in MicroCAD 2010 Conference. Developing a Knowledge Map for University of Miskolc. Lecture. Lectured in MicroCAD 2010 Conference. Implementation of a Dictionary Based Fault-Finder with Prefix and Suffix Handler. Lecture. Lectured in PhD Forum 2010 Conference. Text Mining, Data Hunting and Knowledge Map. Lecture. Lectured in PhD Forum 2010 Conference.
2009	Analysing Linguistic Modules of a Semantic Website. Lecture. Lectured in PhD Forum 2009 Conference. Structures, Fault Tolerant and Effective Search Methods in Text Corpuses, Vocabularies. Lecture. Lectured in PhD Forum 2009 Conference.
2008	Applied Search Methods in Statistical Natural Linguistics. Lecture. Lectured in PhD Forum 2008 Conference.
2007	Wiki works in the library. Lecture. Lectured in MKE 2007 Conference.
2006	eleMEK at the University of Miskolc. Lecture. Lectured in Networkshop 2006 Conference.
2005	Concept of a New Tramway Mainline in Budapest. Article. Urban Trafic. Vol. XLV., No.2. April, 2005
2004	Modular Library System for Digital Documents (eleMEK). Lecture. Lectured in Networkshop 2004 Conference.
1999	Web in the DTP world. Lecture. Lectured in FairPrint '99 Conference.
1998	WINPAR. Windows based parallel programming environment. R&D.

	ESPRIT project 23516 (task 6.9)
	SPOT. Web based information system with SQL database.
	PHARE HU-94.05 0101-L023/61
1997	Miskolc HP. Web and CD-ROM based information system with multimedia.
	ComTrans Ltd. & Town Hall of Miskolc.
	Multimedia Guide.
	ComTrans Ltd.
	WWW Search Engines. Article. Infopen 1997/4.
	Openinfo Publisher Ltd.
	Internet courses.
	ComTrans Ltd.
1996	How to Make Effective Homepage? Lecture.
	Lectured in Regional Communication Nets Conference.
	How to Make Your Own WWW Page? Textbook. (56 pages.)
	ISBN 963 02 9998 4, NIIF 1996.
	UNIX System Administrating
	Central Library in University of Miskolc.
1995	Editing and maintaining the Hungarian Electronic Library site.
	NIIF
	Robotgopher. (Internet Using for the Blind) Lectures.
	Lectured in Regional Communication Nets Conference.
1994	Using QuickC for Windows. Textbook (192 pages).
	ISBN 963 577 120 7, LSI 1994.
	UNIX course for Beginners.
	SZUV.
1993	Editing and maintaining the Internet site of University of Miskolc.
1992	INDI (Computer Based Dispatcher System for Urban Trafic Terminals)
	Hardware and Software. Applied in Miskolc Transport Company since 1992.
1991	i8080 CPU Tutorial Program. (Software & developing documentation)
	Diploma work for Hungarian BSc (3 years) degree (36+77 pages).
	Winner of competition of "Excellent Diploma Work" Foundation.

Teaching Experience:

At University of Miskolc	Digital Electronics	6 semesters
	Control Engineering	4 semesters
	Microprocessors	6 semesters
	Embedded Systems	2 semesters
	Dedicated CPUs	2 semesters
	Computer Hardware	8 semesters
	Programming in C	4 semesters
	Remote Data Proc.	1 semester
	Transputers Systems	1 semester
	Digital Signal Proc.	1 semester
At SZUV	UNIX for Beginners	
At ComTrans Ltd.	UNIX courses	
	Internet courses	
	HTML courses	
	Operating Systems course	
	Multimedia course	

Membership:

Scientific Society of Measurement and Automatization, since 1992