### **CURRICULUM VITAE**

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Marital status:	single



### Education

Nov/03-present:	Petrozavodsk State University, PhD course,	
	3 <sup>rd</sup> (the last) year post-graduate student	
	I passed all the required qualification examinations. Now I'm finishing my	
	PhD thesis. Estimate date of thesis presentation: November, 2006.	
Sep/99-Jun/01:	Petrozavodsk State University, Master Degree (graduation with honors),	
	major in Computer Science (graduate work: "Technology for Data	
	Acquisition in Distributed Information Measurement Systems"),	
	minor in Pedagogy (Higher School Teacher) (graduate work: "Application of	
	Software for Simulation & Elimination of Instrumental Distortion in the	
	course of metrology")	
Sep/95-Jun/99:	Petrozavodsk State University, Bachelor Degree in Computer Science	
	(graduate work: "Development and Improvement of PCB of GPIB Adapter")	

# Languages

Russian:	native
English:	fluent
	Last training: Jul/2004, Moscow, English Summer Camp of American
	Civilian Research & Development Foundation (CRDF).
German:	elementary
	Last training: Jul/1994, Cologne/Berlin/Munich, Award Program of
	Deutsche Pädagogische Austauschdienst (PAD).

# **Employment Experience**

Sep/03-present:	Petrozavodsk State University,
	Department of IMS & Physical Electronics,
	Assistant Professor
	Courses: Informatics, Algorithmic Languages, Programming Technologies,
	Operating Systems, Physics Bases of Information Acquisition, Network
	Technologies
Jun/01-Aug/03:	Petrozavodsk State University,
	Department of IMS & Physical Electronics,
	Engineer
	Responsibilities: technical assistance, software & hardware development,
	web-design

Feb/01-Jun/01:	Emergency Committee of Karelia,	
	Communication Department,	
	Computer Technician	
	Responsibilities: support of FTN electronic mail, administration of network	
	based on Novell NetWare 4.1, technical assistance, hardware service etc.	

# Various Projects

Jan/05-Feb/05:	"Living in Multicultural World"		
	This project is supposed to unite some colleges all over the world. Now this		
	net of colleges consists of Parola Senior High (Finland), Lyceum N1 of		
	Petrozavodsk (Russia), Viet Thanh College (Vietnam) etc. In accordance to		
	my role I delivered several lectures in A-Level Physics (CIE Curriculum) (in		
	English) in Parola Senior High.		
Nov/04-Mar/05	iq.karelia.ru - Free On-line Test System		
	My task was to enhance web interface engine and to improve security of the		
	system. Old security politics was based on "owner-others" rules. New		
	security politics introduced access control lists (ACL).		
Jan/04-present:	"Contour Meccano", http://dims.karelia.ru/contour		
Jan/04-present.	This project is the base of my PhD thesis. The main goal is to develop		
	software for simulation and processing of spectral data in experiments with		
	low-temperature plasma sources. This software is based on Java technology		
	and provides independent development and separate distribution of different		
	"meccano's" blocks (broadening functions, plasma source models, spread		
	functions, post-process functions) without re-compilation of the whole		
	project.		
Oct/03-Jan/04:	www.geo.net		
	I took part in off-shore programmers team "Interactive Future AG"		
	www.ifag.net (former "SourceMill Software"). My role was to modify		
	geo.net web engine for interconnection with MySQL (it was based on Oracle		
	database before).		
Dec/00-present:	thermo.karelia.ru		
	This project implements the ideas of distributed information acquisition		
	(communications over RS232, TCP/IP). My role in the development team		
	was to develop dataware (communication protocols) and a part of software,		
	which implements network communication (in Linux and Win32). The		
	communication protocol and the software are described on		
	http://dia.lab127.karelia.ru		
Mar/99-Jan/03:	Instrumental Distortion: Simulation & Elimination,		
	http://dims.karelia.ru/distort		
	The object of this work was to develop a software for educational and		
	scientific applications that allows to demonstrate the influence of noise on		
	the result of exclusion of instrument distortions, to show the opportunity of		
	noise effect decrease by using a priory information and to demonstrate the		
	limitations of this method. The program has easy and clear interface and was		
	successfully used in educational laboratories in courses on metrology,		
	spectroscopy and plasma diagnostics. Core version was written in C for		
	Win32 platform. 2-dimensional version is available as web-service.		
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#### **Key Qualifications**

- Web development (PHP, Perl).
- TCP/IP network software development for multiple platforms (C/C++, Java).
- Database design development (MySQL, Oracle).
- Acquisition hardware development (based on ISA, GPIB, RS232, CAMAC).
- Unix administration.
- Teaching experience (algorithmic languages, operation systems, programming technologies, architecture of computer systems).

#### **Additional Information**

In 2003, 2004, 2005 I was awarded by Research and Educational Center "Plasma" for research works.

I attended International Conference on Engineering and Computer Education (Brazil, March, 2003) and presented there two works in English:

- Free Accessible Web-based Programs for Simulation and Elimination of Instrumental Distortion
- Data Transfer Protocol for Distributed Information Acquisition for Use in Physical Experiments

#### **Publications in English**

- 1. Luizova L., Soloviev A. Computer Training Program: Instrument Distortions Simulation and Elimination // Learning and Teaching Science and Mathematics in Secondary and Higher Education / Proceedings of the Fifth Inter-Karelian Conference (Petrozavodsk, Russia, 17-19 May 2000). Joensuu: University of Joensuu, 2000. P.158-162.
- 2. Luizova L., Soloviev A. Computer Training Program for Elimination of Instrument Distortion // 7th International Conference on Education and Training in Optics and Photonics (Singapore, 2001) / Proc. SPIE. V.4588. 2002. P.440-447.
- 3. Soloviev A., Luizova L. Free Accessible Web-Based Programs "Simulation and Elimination of Instrument Distortion" for Educational and Scientific Applications // Proceedings of the 3rd International Conference on Engineering and Computer Education (ICECE-2003) (March 16-19 2003, Santos, Brazil). Sao Paolo, 2003.
- 4. Korolkov A., Moschevikin A., Soloviev A. Data Transfer Protocol for Distributed Information Acquisition for Use in Physical Experiments // Proceedings of the 3rd International Conference on Engineering and Computer Education (ICECE) (March 16-19 2003, Santos, Brazil). Sao Paolo, 2003.
- 5. Luizova L., Khakhaev A., Ekimov K., Soloviev A. Rational Tools for Data Obtaining and Processing in Local Plasma Spectroscopy // 16th International Symposium on Plasma Chemistry: Abstracts and full papers on CD (June 22-27, 2003, Taormina, Italy). Taormina, 2003. P.107.
- 6. Luizova L., Khakhaev A., Ekimov K., Soloviev A. The Setup and Software for Local Plasma Spectroscopy // Proceedings of the 30th EPS Conference on Controlled Fusion and Plasma Physics (July 7-11, 2003, St.Petersburg, Russia). St.Petersburg, 2003.
- 7. Korolkov A., Moschevikin A., Soloviev A. Construction of Distributed Sensors Network Based on DTP/DIA // Proceedings of the International Conference on Computer, Communication and Control Technologies (CCCT'03) (July 31, August 1-2, 2003, Orlando, USA). Orlando, 2003.

- 8. Khakhaev A., Luizova L., Ekimov K., Soloviev A. Spatial and time-dependent distribution of plasma parameters in the metal-halide arc lamp // 12th International congress of plasma physics (October 25-29, 2004, Nice, France). Book of abstracts. Nice, 2004.- P.109.
- 9. Ekimov K., Luizova L., Khakhaev A., Soloviev A. Data array acquisition and joint processing in local plasma spectroscopy. // Journal of Quantitative Spectroscopy & Radiative Transfer. 2005. V.96. P.513-523.

#### **Other Interests**

Skiing, swimming,	rock music	

#### Referees

Prof. Anatoly Khakhaev,	Principal Mr. Erkki Lehto,	Dr. Peter Hanstein
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