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Education:

- 1981-1986 Donetsk Polytechnic Institute (DPI), Applied Mathematics (Ms. equivalent)
- 1988-1991 post graduate course, DPI, Computer Science
- 1991 Academic Council of Kiev Cybernetics Institute Ac.Sci. Ukraine, Ph.D., Automated Control
- 2006 Academic Council of Odessa National Academy of Telecommunications (ONAT), Dr.Sci., Telecommunication Systems and Networks

Training courses:

- 1986 System Programmer of RSX11M (DEC), LIMTU, St.Petersburg
- 1994 Organisation of Business in HiTech, RPI (USA) in Kiev
- 1995 Internet and Web Technology, DEC in Apatity, Russia
- 2002 Administration of Modern OS and DBMS, DIIT, Dnepropetrovsk, Ukraine

Jobs:

- 1986-1996 DPI, Department of Applied Mathematics and Informatics (AMI): 1986-1992 assistant professor, 1992-1996 associate professor; chief programmer in software development projects; system programmer; computer network administrator
- 1997-1998 Surgut State University, Department of Computer Science and Informatics, associate professor; chief of Network Technology Laboratory
- 1999-2003 Information and Computer Centre of Odessa Railway, leader engineer
- 2002-2006 ONAT, Department of Communication Networks, associate professor
- 2006-2009 Professor
- March 2005 University Paris-Dauphine, invite professor
- 2009- International Humanitarian University, Department of Computer Engineering, professor
- 2014- Vistula University, Warsaw, Department of Computer Science, professor
- July-August 2015 Technical University of Dortmund, visiting professor, DAAD fellowship

Principal Theoretical Results:

- Explicit construction of Universal Sleptsov/Petri Nets
- Analysis of Infinite Petri Nets with regular structure (linear, square, hypercube)
- Clans of systems of linear algebraic equations, their simultaneous and sequential composition
- Compositional Analysis of Petri Nets
- Decomposition of Petri Net into Functional Subnets
- Functional equivalence and equivalent transformations of timed Petri nets
- Timed Petri nets with multi-channel transitions, their state equation and partial invariants
- Synthesis of Continuous (fuzzy) Logic function given by table

Principal Scientific-Practical Results:

- Software systems: Opera-Topaz – Petri net based production control and management, Nevod – Petri net modeling system for embedded applications, Sergo – editor of electrical circuits
- Plug-in modules for Petri net modeling system Tina: Deborah – decomposition into clans, Adriana – compositional computing Petri net invariants
- Petri net models of networking protocols: TCP, BGP, IOTP, ECMA
- Software generators of Petri net models of grids: square, hypercube, hypertorus
- Colored Petri net models of networks: Ethernet, IP, MPLS, Bluetooth, PBB, E6
- Stack of networking protocols E6 and its implementation in Linux kernel

Publications:

- A monograph, a video-lecture, 2 book chapters, 26 JCR/WoS/Scopus papers
- The complete list is put on: http://daze.ho.ua/paperse.htm#pub

Granted patents:

Vorobiyenko P.P., Zaitsev D.A., Guliaiev K.D. Way of data transmission in network with substitution of network and transport layers by universal technology of channel layer .- Patent on utility model no. 35773, Registered in State Register of Ukraine Patents for Inventions 10.10.2008. In Ukrainian.

Organisation of International conferences and reviewing of journals:

- Program Chair of: 2nd International Symposium on Emerging Topics in Computing and Communications (SETCAC'16), 21-24 September 2016, Jaipur, India.
- PC member of: 8th International KES Conference on Intelligent Decision Technologies, Tenerife, Spain, 15-17 June 2016; 2nd IEEE International Conference on Cybernetics CYBCONF 2015, Gdynia Poland, 24-26 June 2015.
- Reviewer of: AMS Mathematical Reviews; Fundamenta Informatica; Peer-to-Peer Networking and Applications; Journal of Automata, Languages, and Combinatorics; IEEE Transactions on Systems, Man and Cybernetics: Systems; IEEE Transactions on Cybernetics; IMA Journal of Mathematical Control and Information.

Participation in industrial innovation:

- 1988-1991 Donetsk plant Topaz. Introduction of Opera-Topaz – a system of operative planning and management on the base of Petri net models.
- 1991 Sergovska power substation. Introduction of Sergo – an editor of electric circuits of the power substations.
- 1992 Minsk Wood-processing Plant. Introduction of Nevod – a system of modelling of processes and decision making on the base of Petri net models.
- 1992 Motorsich Corporation, Zaporizhzhe. Introduction of Opera-Topaz.

Prizes and Awards:

- Senior member of the IEEE – 2011
- Senior member of the ACM – 2015
- DAAD fellowship – 2015

Funding received:

- “Security of model-driven software development” – DAAD fellowship, 2015
- "Analysis of computational grids efficiency via Colored Petri Nets" – Austria-Ukraine cooperation grant, 2013-2014
- "Production control with Petri nets" - China-Ukraine cooperation grant, 2011-2012
- "Developing New Addressing Systems for World-Wide Networks (E6)" – Ukraine state grant, 2008-2009
- "Verification of Complex Networking Protocols" – grant NATO ICS.NUKR.CLG 982698, 2007-2008
- "Simulating Backbone MPLS Networks" – Ukrtelekom corporation, 2007-2008

Teaching work:

Lectures: Networking Technology, Modeling of Systems and Networks, Operating Systems, System Software, System Programming, Algorithms and data structures, Algorithms and methods of computation, Parallel and distributed computations, Development of translators, Design of computer systems and networks, Systems of artificial intelligence.

Supervising and mentoring activities:

2 Ph.D. students, 28 Ms. Students, 12 Bc. students

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