

NIKOLAY Yu. PONOMAREV
CURRICULUM VITAE

Personal Information:

Office Address: Social & Economic Sciences Research Center
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Education:

- Ph.D. (1998) Moscow State Technical University of Civil Aviation, Moscow, Russia
Area: Electrical Engineering
- M. S. (1992) Yaroslavl State University, Yaroslavl, Russia
Area: Electrical Engineering

Professional experience

- 06/03-present Senior research programmer, Social & Economic Sciences Research Center
Washington State University, Pullman, WA, USA.
Duties: Computer programming, WEB development, statistical analysis.
- 12/98-12/99 Assistant professor, Department of Physics
Yaroslavl State University, Yaroslavl, Russia
Duties: Taught the courses of "Oscillation Theory" and "Discrete Dynamic Systems"
- 06/96-12/99 Administrative director of Laboratory of the Dynamics of Electronic Systems,
Department of Physics, Yaroslavl State University, Yaroslavl, Russia
Duties: Investigation mathematical models and laboratory patterns of electronic systems
dynamics, maintaining functioning of electronic equipment (computers, measuring tools)
- 06/93-12/99 Computer programmer, analyst, Ecology Research Group, Rybinsk, Russia
Duties: mathematical and computer modeling of ecological systems
- 06/93-12/99 Computer programmer, Joint Stock Company "Omega", Yaroslavl, Russia
Duties: Developing accounting and inventorying software

Professional skills

<u>Skill</u>	<u>Skill Level</u>	<u>Last Used</u>	<u>Experience</u>
<u>Delphi and Pascal programming</u>			
Object-oriented programming	Expert	Currently used	12 years
Relational Database management programming	Expert	Currently used	6 years
Reusable components development	Expert	Currently used	9 years
Microsoft COM (Component Object Model)	Expert	Currently used	6 years
Distributed calculations programming	Expert	Currently used	8 years
Multithread programming	Expert	Currently used	8 years
Dynamic systems analysis	Expert	Currently used	15 years
<u>Visual BASIC programming</u>			
VB for Microsoft Word and Excel	Expert	Currently used	8 years
SPSS script programming	Expert	Currently used	5 years
ArcView GIS script programming	Expert	2000	3 years
<u>WEB applications development</u>			
HTML coding	Expert	Currently used	8 years
ASP programming	Expert	Currently used	7 years
ASP.net programming	Expert	Currently used	4 years
Microsoft FrontPage	Expert	Currently used	8 years
Macromedia Dreamweaver	Expert	Currently used	6 years
<u>Database management system</u>			
Microsoft SQL server	Expert	Currently used	7 years
ORACLE	Intermediate	1999	2 years
Interbase	Intermediate	2002	2 years
<u>Graphical representation/processing applications</u>			
CorelDRAW, CorelPaint	Expert	Currently used	10 years
Adobe PhotoShop	Expert	Currently used	8 years
Microsoft Word, Excel, PowerPoint	Expert	Currently used	13 years
<u>Statistical analysis applications</u>			
SPSS	Expert	Currently used	6 years
SAS	Expert	Currently used	6 years
STATA	Expert	Currently used	4 years

Expertise and services provided to:

Social & Economic Sciences Research Center

June 2003 to present

- ◇ Developed methodology, techniques, and templates for rapid making of completely customizable WEB based surveys
- ◇ Developed SQL server data base architecture for WEB survey data collection
- ◇ Developed SQL server data management application for monitoring data collection process and extraction data to SAS and SPSS datasets
- ◇ Developed Computer Assisted Data Collection (CADC) application for multi-mode (WEB, mail, phone) surveys

- ◇ Developed techniques for implementing Dillman Visual Design concepts for self-administrative surveys in Microsoft Word
- ◇ Developed on-line surveys' progress reporting system
- ◇ Developed SESRC projects' SQL data base and management application
- ◇ Taught SESRC personnel how to use developed templates and programs to improve efficiency and productivity in WEB and mail survey development, data management and collection

United States Department of Agriculture (USDA)

June 2003 to present

- ◇ Redesigned of Agriculture Resource Management Survey and Agriculture Census questionnaires in Microsoft Word using Don Dillman's Visual Design's concepts

Washington State Department of Transportation

May 2004 to present

- ◇ Developed on-line management application for Commute Trip Reduction (CTR) program
- ◇ Redesigned CTR web survey

National Sciences Foundation

October 2003 to present

- ◇ Developed client's and server's sides scripting and SQL data base architecture for collecting extra information about respondents' behavior (responses order, time and changes) during filling out WEB survey

United States Centers for Disease Control and Prevention

May 2004 to October 2004

- ◇ Redesigned Death Scene Investigation of Sudden, Unexplained Infant Death and the Investigation Reporting Form in Microsoft word implementing Dillman Visual Design concepts
- ◇ Developed a manual for using advanced features of Microsoft Word which is used by Center's personnel for further changes and improvement of various reporting forms

Department of Sociology, Washington State University

June 2006 to present

- ◇ Developed SQL database, data collection and management application, and WEB reporting application for Student Learning Objectives assessment and evaluation
- ◇ Assisted graduate students and professors with programming, designing and implementing web surveys, and other computer problems

Community services

February 2000 to present

- ◇ Designed and developed clients data management application for Clemson Community Care (Clemson, SC) and United Methodist Church (Easley, SC)
- ◇ Trained personnel in using computers and developed by me applications
- ◇ Assisted with programming and any computer related problems
- ◇ Developed a new evaluation instrument and evaluated the services provided by Clemson Community Care to the clients
- ◇ Worked with various research groups at Clemson University. Programmed statistical analyses for experiments in education, sociology, and agriculture
- ◇ Consulted Community Action Center (Pullman, WA) in how to use the existing computer programs more effectively

Awards

- ◇ 2002 Distinguished Volunteer Service Award (Clemson Community Care, Clemson SC)
- ◇ 1996 - Distinguished Graduate Student Paper, Graduate Students Research Forum, Yaroslavl State University, Russia
- ◇ 1993 - Departmental Distinguished MS Thesis Award, Yaroslavl State University, Russia
- ◇ 1988 - 1993 Governmental Honorable Scholarship for Academic Excellence, Yaroslavl State University, Russia

Personal strength

- ◇ Excellent interpersonal skills
- ◇ Good problem solving skills
- ◇ Detail oriented
- ◇ Team player

Publications

- Gertseva, V.V., Gertsev, V.I., Wainwright, T.C., Ponomarev, N. Yu. Juvenile salmon survival in coastal waters of the Northeast Pacific Ocean: top-down or bottom-up control? *Fisheries research*. (in review)
- V. V. Gertseva, V. I. Gertsev, N. Y. Ponomarev 2006. Integrative model of a population distribution in a habitat, *Ecological Modelling*. 193 (3-4) March: p. 575-588
- V. V. Gertseva, J. E. Schindler, V. I. Gertsev, N. Y. Ponomarev and W. R. English 2004. A simulation model of the dynamics of aquatic macroinvertebrate communities, *Ecological Modelling*. 176 (1-2) August: p. 173-186
- V. V. Gertseva, V. I. Gertsev and N. Y. Ponomarev 2003. Tropho-ethological polymorphism of fish as a strategy of habitat development: a simulation model, *Ecological Modelling*. 167 (1-2) September: p.159-164
- N.Yu. Ponomarev and L.N. Kazakov 1997. The Stability on the Whole of a 2nd order Pulse Phase-locking System with the trapezoidal Detector Characteristic. *Journal of Communication Technology and Electronics*. 42 (12): 1362-1367.
- L.N. Kazakov and N. Yu. Ponomarev 1993. The Stability of a Pulse Phase-lock Loop System with Triangular Detector Characteristic. *Telecommunications and Radio Engineering* 12: p.36-42.

Presentations

- N.Yu. Ponomarev “Stochastic Nonlinear Dynamics of 2nd Order Pulse Phase-Locked Loop with Piecewise Linear Detector’s Characteristics”. Rybinsk State Academy of Technology Annual Scientific Conference, Rybinsk, 1998.
- N.Yu. Ponomarev, Kazakov L.N. “Spectral Characteristics of Frequencies Synthesizer based on 3rd Order Pulse Phase-Locked Loop”. Annual Scientific Conference “Development of Communication’s Systems and Facilities”, Voronezh, 1997.
- N.Yu. Ponomarev, L.N. Kazakov “Pull-in-Range of 3rd Order Pulse Phase-Locked Loop with Trapezoidal Detector’s Characteristics”. Annual Scientific Conference “Development of Communication’s Systems and Facilities”, Voronezh, 1997.
- N.Yu. Ponomarev, L.N. Kazakov “Pull-in-Range of 2nd Order Pulse Phase-Locked Loop with Trapezoidal Detector’s Characteristics”. 52nd Scientific Meeting of Radio Engineers. Moscow, 1997
- N.Yu. Ponomarev, L.N. Kazakov, Paley D.E. “Frequencies Synthesizer with Improved Spectral Characteristics”. Annual Scientific Conference “Development of Communication’s Systems and Facilities”, Voronezh, 1996.
- N.Yu. Ponomarev “Dynamic Processes in 3rd Order Pulse Phase-Locked Loop with Trapezoidal Detector’s Characteristics”. ”. 4th Scientific Meeting “Nonlinear Oscillations of Mechanic Systems”. N. Novgorod, 1996

- N.Yu. Ponomarev, L.N. Kazakov "Pulse Phase-Locked Loop with Arbitrary Piecewise Linear Detector's Characteristics". Anniversary Conference "Actual Problems of Natural and Humanitarian Sciences". Yaroslavl, 1995.
- N.Yu. Ponomarev "Oscillation's Regimes of 2nd Order Digital Phase-Locked Loop with Triangular Detector's Characteristic" 51st Scientific Meeting of Radio Engineers. St. Petersburg, 1995
- N.Yu. Ponomarev, L.N. Kazakov "Dynamics of 2nd Order Pulse Phase-Locked Loop with Trapezoidal Detector's Characteristics". Annual Scientific Conference "Development of Communication's Systems and Facilities", Voronezh, 1994.
- L.N. Kazakov, N.Yu. Ponomarev "Periodic Motions Appeared at Piecewise Linear Cylinder's Reflection". 3rd Scientific Meeting "Nonlinear Oscillations of Mechanic Systems". N. Novgorod, 1993
- L.N. Kazakov, N.Yu. Ponomarev "Pull-in-Range of 2nd Order Pulse Phase-Locked Loop with Triangular Detector's Characteristic". 50th Scientific Meeting of Radio Engineers. Yaroslavl, 1993