Eva Kasparova

e-mail: eva.kasparova@vanderbilt.edu

Home address:

2560, Devon Valley Dr., Nashville, TN-37221 Phone: +1 (615) 673-2642 **Cell**: +1 (615) 419-3319

Office: +1 (615) 936-5089

Work address:

Department of Biomedical Informatics Vanderbilt University Medical Center 2209 Garland Avenue Nashville, TN 37232-8340, USA

Professional Experience

$\label{lem:condition} \textbf{Vanderbilt University Medical Center, Department of Biomedical Informatics}\ ,$

Nashville,TN, 09/2004 - Present

Research Fellow at Discovery Systems Laboratory

- Conducting causal discovery, classification and feature selection experiments with machine learning methods (Bayesian Networks, Support Vector Machines, Inference algorithms);
- Developing and evaluating new strategies for Decision Support in the presence of missing values;
- Applying a cognitive approach to the predictive modeling in the project on short-term prognosis for patients with subarachnoid aneurysms (SAH);
- Leadership in the development of the collaboration with Burdenko Neurosurgical Institute (Moscow).

Groupe TRANSICIEL, Paris, France, 05/2001 –05/2004

Research Software Engineer

- Participated in an ecological project for an Automated Management System (MS) for cleaning of the city of Paris;
- Designed and created new databases;
- Designed and developed modules for automated computing and reporting;
- Created scripts for the MS testing.

Immunotech (Beckman-Coulter), Marseille, France, 06/1999 - 11/1999

Software Engineer at Computer Division

- Provided assistance in Database (DB)analysis and testing of "Fourth Shift MSS"
- Improved DB access and information retrieving;
- Developed tools for the company's internal needs such as control of radiological products, drugs' traceability etc.

University Aix-Marseille II, Marseille , 01/1994 - 05/1999

Instructor in Mathematics . Part of the Mathematics for Genome Group.

- Instructor of Undergraduate Mathematics Courses: analysis, algebra, differential geometry and differential equations;
- Participated in Genome research: recoding and alignement algorithms.

Institute for Systems Studies (Russian Academy of Science), Moscow, 01/1990 - 07/2002 Senior Researcher at Department of Medical Informatics.

- Participated in research projects in cardiology and intensive care;
- Developed prognostic and diagnostic models for patients with myocardial infarction:
- Conducted a prospective evaluation of clinical decision support models in three Moscow Hospitals.

Academy of Medicine, Moscow, 1985 - 1990

Researcher (85-87), Senior Researcher (from 1988) at Scientific Department.

- Developed a novel approach to the issue of small size samples in clinical and biomedical predictive models;
- Coordination of the work of interdisciplinary group developing questionnaires for clinical research.

Education

- *Master Degree in Computer Sciences* (D.E.S.S. Informatique), Université de Mediterranee, Marseille, 1999
- *Ph.D in Mathematics* (mathematical analysis), Rostov State University, Department of Mathematics, 1980
- Master Degree with distinction in Applied Mathematics,
 Kharkov State University, Department of Mechanics and Mathematics, 1975

Selected Publications

Journal Papers:

E.I.Glazman, « On the spectral theory of difference-differential operators ». Functional Analysis and its Applications (Funktsional'nyi analiz i ego prilozheniya,), 1977, v.11, N4, pp.76-77.

E.I.Glazman, Uspekhi Matematicheskih Nauk, 1978, v.XXXIII, n2, pp.189-190. Transl. in English: Russian Mathematical Surveys, p.229-230.

E.I.Kasparova, (with V.G.Ananchenko, A.L.Syrkin, M.L.Izvekova, E.A.Fonsova), « Prognosys of the course and outcome of acute myocardial infarction ». Soviet Medicine (Sovetskaya Medicina), 1988, n 5, pp.3-6.

E.I.Kasparova, (with I.M.Gelfand, M.L.Izvekova, A.L.Syrkin). « Verification of the decision-making rule for outcome and complications of the acute myocardial infarction. », Scientific Council in Cybernetics, Russian Ac. Sci., Preprint, Moscow, 1990, pp.1-65.

E.I.Kasparova, (with I.M.Gelfand, M.L.Izvekova, A.L.Syrkin). « Structural units in the problem of prognosis of the acute transmural myocardial infarction. », Scientific Council in Cybernetics, Russian Ac. Sci., Preprint, Moscow, 1994, pp.1-43.

Recent papers in Conference Proceedings:

M.A.Shifrin, E.I.Kasparova. « Diagnostic Games, Tool for Clinical Experience Formalization in Interactive " Physician – IT–specialist " Framework », Computer-based Medical Systems Symposium, 2007, submitted.

Teaching Experience

Courses taught , 1980-1999

Kharkov Institute for Education, Assistant Professor (1980-1985):

Calculus

Multivariable Calculus

Ordinary and Partial Differential Equations

Moscow State institute for History ans Archives, Assistant Professor (1986-1992):

Probability Theory

Theory of Queuing

Linear Programming and Optimization Problems

<u>University of Aix-Marseille II</u>, Instructor (1994-1999):

Differential Geometry

Mathematical Analysis I and II

Linear Algebra

Methods of Ordinary Differential Equations

Professional and Scientific Societies

AMIA (American Medical Informatics Association) – 2003-Present

Languages and Personal

- USA resident
- French citizen
- Fluent in English, French, Russian and Ukrainian