33/5 Kirpichnaya Str., room 825
Moscow, 105187
+7 (495) 772-95-90 ext. 55148
+7 (903) 514-85-97
http://www.hse.ru/staff/beklaryan
abeklaryan@hse.ru

ARMEN L. BEKLARYAN

DATE OF BIRTH	May 19, 1987
LOCATION	Moscow
CITIZENSHIP	Russian Federation
DEGREES	Candidate of Sciences* (PhD) in Mathematical Modelling, Numerical Methods and Software Complexes
	Thesis Title: Agent-based model of crowd behavior in an emergency situation for evaluating intensity of the output flow front

EDUCATION

NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

2015 – 2016

Postgraduate programme in Mathematical modeling, numerical methods and complexes of programs, Department of Business Analytics

LOMONOSOV MOSCOW STATE UNIVERSITY

2009 – 2012

Postgraduate programme in Differential equations, dynamical systems, and optimal control, Faculty of Mechanics and Mathematics

LOMONOSOV MOSCOW STATE UNIVERSITY

2004 – 2009

Diploma in Mathematics, Faculty of Mechanics and Mathematics

WORK EXPERIENCE

NATIONAL RESEARCH UNIVERSITY HIGHER SCHOOL OF ECONOMICS

2013 to present

Lecturer, Faculty of Business and Management, School of Business Informatics, Department of Business Analytics

ANALYTICAL CENTER CEMI-GENKEY LLC

2012 to present

Deputy Director General

GENKEY LLC

2011 to present

Software Engineer, Research and Training Center

LANGUAGE PROFICIENCY	**Russian:** native speaker
	English: upper-intermediate

PROFESSIONAL INTERESTS

Software Engineering

Differential Equations

Mathematical methods in economics

Databases and data warehouses

Business Intelligence and Data mining

Simulation dynamical modeling

Agent-based and CGE modeling

CERTIFICATES

IBM certificate for the course "AIX Jumpstart for UNIX Professionals"

IBM certificate for the course "Learning Mathematical Programming for IBM ILOG CPLEX Optimization Studio"

IBM certificate for the course "Model Development with IBM ILOG CPLEX Optimization Studio"

NRU HSE certificate for the course "Bases of organization and conducting of training courses in system LMS eFront"

NRU HSE certificate for the course " Simulation modeling and its business applications in the IDE AnyLogic"

Global Knowledge certificate for the course "Essentials for IBM Cognos BI (v10.2.2)"

KEY PROJECTS

Sberbank
Development of the tasks distribution module for Interregional Underwriting Center
Technologies: Oracle, AnyLogic.

The non-state pension fund "BLAGOSOSTOYANIE"
Development of the information system to simulate the operations of the Fund for the medium and long term
Technologies: MS SQL Server, PowerSim Studio.

The Ministry of education and science of the Russian Federation
Development of the system of data storage and processing of scientific and educational institutions of the Russian Federation
Technologies: MS SQL Server, PHP, OLAP.

Federal service for supervision in the sphere of science and education
Development of the system of forecasting of key metrics of scientific and education sector of the Russian Federation
Technologies: PowerSim Studio, IBM Cognos BI.

KEY SKILLS	Computer programming: C, C++, C#, Visual Basic, PHP, Java, VBA;
	Special software: IBM Cognos BI, Powersim Studio, Visual Studio, MS Power BI, AnyLogic, IBM SPSS and a number of other;
	Database design: MS SQL Server, ErWin, MySQL, Oracle, IBM DB2 and a number of other;
	Development of simple regression models (including on the basis of panel data);
	Development of predictive models based on systems of simultaneous equations;
	Carrying out statistical tests (Granger, ARIMA, ANOVA, et al.);
	Cointegration analysis (detection of structural changes);
	Factor analysis;
	Multivariate statistical analysis and probabilistic modeling;
	Streaming modeling;
	Agent Based, Discrete simulation and System Dynamics;
	Financial Econometrics – identifying performance factors of enterprises and financial institutions;
	Situation analysis, assessment of sensitivity;
	Logical data modeling;
	Markov chains and decision trees;
	Neural networks;
	Cluster analysis;
	Numerical methods;

AWARDS AND ACCOMPLISHMENTS	Best Teacher NRU HSE (2014, 2016)

GRANTS	**RFBR Grant 15-37-20265**
	Methods and algorithms for the research of first boundary value and optimization problems for the systems described by functional differential equations of pointwise type
	RFBR Grant 15-51-05011
	Development of models and software complexes for the optimum control of the agents' dynamics of ecological-economics system of the Republic of Armenia
	RFBR Grant 16-01-00110
	Traveling and quasitraveling waves in complex dynamic systems
	RFBR Grant 16-36-00338
	Simulation of social processes: study of conditions of populations' extinction due to intrapopulation causes and spread of distrust in society on the basis of agent-based paradigm

PUBLICATIONS   Beklaryan A. L., Beklaryan L. A. Solvability Problems for a Linear Homogeneous Functional-Differential Equation of the Pointwise Type // Differential Equations. 2017. Vol. 53. No. 2. P. 145-156.

Akopov A. S., Beklaryan A. L., Beklaryan L. A., Saghatelyan A. K. Agent-based simulation modelling for regional ecological-economic systems. A case study of the Republic of Armenia // Journal of machine learning and data analysis. 2016. Vol. 2. No. 1. P. 104-115

Beklaryan A. L., Akopov A. S., Saghatelyan A. K., Sahakyan L. V. Control system for ecological modernization of enterprises (on the example of the Republic of Armenia) // Business Informatics. 2016. No. 2(36). P. 71-78.

Akopov A.S., Beklaryan L.A., Beklaryan A.L., Saghatelyan A.K. Modelling the regional ecological-economic system with the mechanism of the government regulation for the case study of the Republic of Armenia // Economics of Contemporary Russia. 2016. Vol. 72. No. 1. P. 109-119. [in Russian]

Beklaryan A. L., Belousov F.A., Zarodnyuk T. S., Anikin A.S., Finkelshtein E. A. The technology for solving boundary value problems for systems of nonlinear functional differential equations of pointwise type // Modern technologies. System analysis. Modeling. 2016. Vol. 49. No. 1. P. 19-26. [in Russian]

Beklaryan L.A., Beklaryan A.L., Belousov F.A. The task of managing boundary conditions in the variational problem with deviations of the argument // Tambov University Reports. Series: Natural and Technical Sciences. 2015. Vol. 20. No. 6. P. 1736-1747. [in Russian]

Beklaryan A.L. Exit front in the model of crowd's behavior in extreme situations // Tambov University Reports. Series: Natural and Technical Sciences. 2015. Vol. 20. No. 4. P. 851-856. [in Russian]

Beklaryan A.L. Simulation model of crowd behavior in the IDE AnyLogic // Bulletin of BSU. 2015. No. 9. P. 40-53. [in Russian]

Beklaryan A.L., Akopov A.S. Simulation of human crowd behavior based on intellectual dynamics of interacting agents // Business Informatics. 2015. Vol. 31. No. 1. P. 69-77. [in Russian]

Beklaryan A.L. On the Existence of Solutions of the First Boundary-Value Problem for Elliptic Systems of High Order in Unbounded Domains // Mathematical Notes. 2014. Vol. 96. No. 2. P. 290-293.

Akopov A.S., Beklaryan L.A., Beklaryan A.L., Saghatelyan A.K. The integrated model of eco-economic system on the example of the Republic of Armenia // Computer Research and Modeling. 2014. Vol. 6. No. 4. P. 621-631. [in Russian]

Beklaryan A.L. On the existence of solutions of the first boundary value problem for elliptic equations on unbounded domains // International Journal of Pure and Applied Mathematics. 2013. Vol. 88. No. 4. P. 499-522.

Beklaryan A.L. On the Existence of Solutions of the First Boundary Value Problem for Elliptic Equations on Unbounded Domains // Russian Journal of Mathematical Physics. 2012. Vol. 19. No. 4. P. 508-511.

CONFERENCES   International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2016) (Singapore). Presentation: Simulation of Agent-rescuer Behaviour in Emergency Based on Modified Fuzzy Clustering.

XVII April International Academic Conference on Economic and Social Development (Moscow). Presentation: On crowd's clustering algorithms in emergency situations.

International conference "Kolmogorov Readings VII: General control problems and their applications" (Tambov). Presentation: Exit front in the model of crowd's behavior in extreme situations.

III International conference "Stability and Control Processes" (St. Petersburg). Presentation: Multi-objective optimization of ecological-economic systems. A case study of the Republic of Armenia.

XVI April International Academic Conference on Economic and Social Development (Moscow). Presentation: Agent-based model of crowd behavior in an emergency situation.

The 3rd International Conference "Optimization and Applications (OPTIMA-2012)" (Costa da Caparica). Presentation: Existence theorems for elliptic equations in unbounded domains.

The 2nd International Conference "Optimization and Applications (OPTIMA-2011)" (Petrovac). Presentation: The first boundary value problem for the Laplace equation in unbounded domains.

Dynamic Systems, Nonlinear Analysis and Application (Yerevan). Presentation: The first boundary value problem for the Laplace equation in unbounded domains.

SUMMARY   Developing and implementing of solutions based on intelligent control systems, data visualization and advanced business analytics in the following areas:

- Re-engineering and converting of existing Customer's models to the business simulation platforms PowerSim Studio and AnyLogic;
- Implementation of the visualization and multidimensional data analysis subsystems;
- Development of optimization modules designed to search for optimal management (strategic) decisions;
- Data mining and search for latent dependencies and "bottlenecks" in business processes;
- Development of situational center for top managers;
- Consulting and training.