

Associate Professor, Department of Computer Sciences, Faculty of Exact & Natural Sciences, Ivane Javakhishvili Tbilisi State University, Room 353, University str. 13, Tbilisi 0186, Georgia  
Mobile: (+995 99) 599 55 59 00, e-mail: lela.alkhazishvili@tsu.ge

## LELA ALKHAZISHVILI

### Experience

---

2013-up to now -Ivane Javakhishvili Tbilisi State University, Faculty of Exact and Natural Sciences, Department of Computer Sciences, Associate Professor.

2012- 2013 Ivane Javakhishvili Tbilisi State University, Faculty of Exact and Natural Sciences, Department of Computer Sciences, Specialist.

2006-2012 Ivane Javakhishvili Tbilisi State University, Faculty of Exact and Natural Sciences, Department of Computer Sciences, Associate Professor.

1995-2006 Ivane Javakhishvili Tbilisi State University, Faculty of Applied Mathematics and Computer Sciences, Chair of Control Theory, Assistant.

1990-1995 Ivane Javakhishvili Tbilisi State University, Faculty of Cybernetics and Applied Mathematics, Chair of Control Theory, Junior Researcher.

### Education

---

1981-1986 Master's degree (equal) in Mathematics - Mathematical software. Ivane Javakhishvili Tbilisi State University, Faculty of Cybernetics and Applied Mathematics.

2004 Candidate of Physical and Mathematical Sciences - Ordinary Differential Equations. Ivane Javakhishvili Tbilisi State University. (Ph.D. in Mathematics, #004314)

### Research Interests

---

1. Optimal problems with delays.
2. Mathematical modelling of processes.
3. Evolutionary algorithms.

### Teaching Courses

---

Basics of Programming  
Methods of Optimization  
The System of Computer Mathematics MATHCAD  
Mathematical Programming  
Operations Research  
Fundamental Algorithms  
Algorithms and Data Structures  
Design of Algorithms

## Selected Publications

---

1. Necessary conditions of extremality of initial moment for one class variation problem with delay argument. *Proc. Javakhishvili TSU, Appl. Math. And Inf.* 342(20) 2000, 5-8.(with T Tadumadze)
2. About local representations of the variation of solutions for one class controlled system with delays. *Rep. Enlarged Sess.Semin. I. Vekua Inst. Appl. Math.* 15(2000), No. 1-3, 37-39.
3. ,The formulas of variation of the solution for one class controlled system with delays and with continuous initial condition. *Rep. Enlarged Sess.Semin. I. Vekua Inst. Appl. Math.* 17(2002), No. 17, 26-29.
4. Necessary conditions of optimality for optimal problems with delays and with a discontinuous initial condition. *Mem. Differential Equations Math. Phys.* 22(2001),154-158. (with T. Tadumadze) <http://www.rmi.ge/jeomj/memoirs/>
5. Formulas of variation of solution for non-linear controlled delay differential equations with discontinuous initial condition. *Mem. Differential Equations Math. Phys.* 29(2003),125-150. (with T. Tadumadze) <http://www.rmi.ge/jeomj/memoirs/>
6. The linearized maximum principle for optimal problems with variable delays and continuous initial condition. . *Mem. Differential Equations Math. Phys.* 29(2003),153-155.
7. Formulas of variation of solution for non-linear controlled delay differential equations with continuous initial condition. *Mem. Differential Equations Math. Phys.* 31(2004),83-97. (with T. Tadumadze) <http://www.rmi.ge/jeomj/memoirs/>
8. Optimal problems with incommensurable delays and with continuous and discontinuous initial condition. Symposium on Differential Equation and Mathematical Physics Dedicated to the 100-th Birthday Anniversary of Academician V. Kupradze and 90-th Birthday Anniversary of Academician N. Vekua. Abstract, Tbilisi, Georgia, December 24-25, 2003, <http://www.rmi.acnet.ge/2003> DEMPH
9. Necessary Conditions of Extremality of Initial Moment for One Class of Variation Problem with Delay Argument. (with T. Tadumadze) *Computer Sciences and Telecommunications* 2005(No 2(6)) [2005.09.30] <http://gesj.internet-academy.org.ge>
10. [Local Variation Formulas for solution of Delay Controlled Differential Equation with Mixed Initial Condition.](#) *Mem. Differential Equations Math. Phys.* 51(2010),17-41. (with M. Iordanishvili) <http://www.rmi.ge/jeomj/memoirs/>
11. On One Modification of Heavy Ball Method. *Proceedings of A.Razmadze Mathematical Institute*, 161 (2013), 83-95 (with K.Gelashvili, I.Khutsishvili, N.Ananiashvili) <http://www.rmi.ge/proceedings/>