



**Bidzina Midodashvili**

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Computer Science**

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**Education:**

- **University Diploma in Mathematics, Ivane Javakhishvili Tbilisi State University**
- **Ph.D, in BVPs for hyperbolic PDEs, Ivane Javakhishvili Tbilisi State University**

**Teaching Courses:**

- **Software Engineering**
- **Object oriented programming VBA**
- **Introduction to Programming (Java)**

**Research Interests**

- **Genetic algorithms**
- **Programming technologies**
- **BVPs for PDEs**

## **Selected Publications**

1. 1. Method of corrections by higher order differences for elliptic equations with variable coefficients (with G. Berikelashvili). Georgian Mathematical Journal, 2016, Volume 23, Issue 2, Pages 169–180.
2. On increasing the convergence rate of difference solution to the third boundary value problem of elasticity theory (with G. Berikelashvili). Boundary Value Problems (2015), 2015:226
3. Method of corrections by higher order differences for one nonlocal boundary-value problem (with G. Berikelashvili). Transactions of A. Razmadze Mathematical Institute (2016), <http://dx.doi.org/10.1016/j.trmi.2016.01.005>.
4. On the improvement of convergence rate of difference scheme for one mixed boundary-value problem (with G. Berikelashvili). Mem. Differential Equations Math. Phys, 2015, Volume 65, 2015, 23–34
5. Compatible convergence estimates in the method of refinement by higher-order differences (with G. Berikelashvili). Differential Equations, 2015, Vol. 51, No. 1, pp. 107–115.
6. On the solvability of a problem nonlocal in time for a semilinear multidimensional wave equations (with S. Kharibegashvili). Ukrainian Math. J. 67 (2015), No. 1, 82-105.
7. On the improvement of convergence rate of difference schemes with high order differences for a convection-diffusion equation (with G. Berikelashvili, Murli M. Gupta). Proc. ICNAAM-2014, AIP conf. Proc. 1648.
8. On the solvability of one boundary value problem for one class of semilinear second order hyperbolic systems (with S. Kharibegashvili). J. Math. Anal. Appl. 400 (2013), 345-362.
9. One multidimensional version of the Darboux first problem for one class of semilinear second order hyperbolic systems (with S. Kharibegashvili). Nonlinear Differential Equations and Applications 20 (2013), No. 3, 595-619.
10. On the One Method of Constructing Optimal Mixed Strategies in Fuzzy Antagonistic Matrix Games (with P. Dvalishvili). International Conference "Modern Problems in Applied Mathematics", 4-7 September, 2013, Tbilisi, Georgia.
11. Solvability of nonlocal problems for semilinear one-dimensional wave equations (with S. Kharibegashvili). Electron. J. Differential Equations 2012, No. 28, 1-16.
12. Genetic algorithm approach in the minimization of the risk of financial portfolio (with P. Dvalishvili). Proceedings of 2012 6th International Conference on Application of Information and Communication Technologies (AICT), 17-19 October 2012, Tbilisi, Georgia.
13. Genetic algorithm and university timetable problem (with L. Midodashvili). Transactions, Automated Control Systems, GTU, No 1(10), 2011.
14. Program for Teaching Process Management in a University (with L. Midodashvili). Transactions, Automated Control Systems, GTU, No 1(10), 2011.
15. Global solvability of the Cauchy characteristic problem for one class of nonlinear second order hyperbolic systems (with S. Kharibegashvili). J. Math. Anal. Appl. 376 (2011) 750–759.
16. Finite difference solution of a nonlinear Klein-Gordon equation with an external source (with G. Berikelashvili, O. Jokhadze, S. Kharibegashvili). Mathematics of Computation, Volume 80, Number 274, April 2011, Pages 847–862.