

## **List of Scientific Works (Most recent)**

### **Ekaterine Gvaramia**

#### **Monograph**

1. N. Beraia, E. Bochoridze, E. Gvaramia. Changing properties related to the accuracy of estimates of regression coefficients of simplex-lattice plans under experimental error conditions. Selected issues of modern science. Monograph. Part XVII./ Scientific ed., D.P.n., Prof. S. P. Akutina. – Moscow: Publishing house "Pero", 2015. – 125 p. **(IF)**
2. N. Beraia, E. Gvaramia. Research on the properties of second-and Third-Order rotatable plans under experiment errors. Publishing House "Technical University". 2013, P.157, ISSN 978-9941-20-319-0.

#### **Articles**

1. Alexander Benashvili, Eka Gvaramia. Serial architecture - a modern trend in the field of interface development. 2025 Modern Challenges and Achievements in Information and Communication Technologies. IV International Scientific - Practical Conference, © Publishing House - "Technical University", ISBN 978-9941-520-86-0. 433-438 P.
2. Alexander Benashvili, Eka Gvaramia, Nino Tsiklauri. Parallelism in Modern Processors. International Scientific-Practical Conference Modern Challenges and Achievements in Information and Communication Technologies – 2024. © Publishing House - "Technical University", 2024. ISBN 978-9941-512-80-3. 152-157 P.
3. A. Benashvili, E. Gvaramia. On the Issue of Choosing a Processor for a Computer System. International scientific-practical conference "Modern challenges and achievements in information and communication technologies-2023. Tbilisi, Publishing House - Technical University, 2023. ISBN 978-9941-512-06-3. P.170-175.
4. M. Kiknadze, I. Makasarashvili, E. Gvaramia. Digital reconstruction system. ციფრული რეკონსტრუქციის სისტემა. International scientific-practical conference "Modern challenges and achievements in information and communication technologies-2023. Tbilisi, Publishing House - Technical University, 2023. ISBN 978-9941-512-06-3. P. 261-266.
5. A. Benashvili, E. Gvaramia, E. Bochoridze. MODIFICATION OF THE COMPUTER ARCHITECTURE BASED ON THE GALS INTERFACE. International Scientific and Practical Conference "Innovations and Modern Challenges 2022" dedicated to the 100th anniversary of the Georgian Technical University and the 65th anniversary of the Faculty of Informatics and Control Systems. Tbilisi, Technical University". Publishing House "Technical University", 2023. ISBN 978-9941-28-944-6. P. 181-185.
6. E. Bochoridze, E. Gvaramia, N. Jojua. Algorithms for processing and analyzing large volumes of data. XXX International scientific and practical conference, "Interaction of society and science: problems and prospects". London, England. 2021. ISSN 978-1-63848-652-7. 467-468P.
7. Z. Jojua, N. Jojua, E. Gvaramia, E. Bochoridze. Functional programming - Usage aspects in PYTHON. Georgian Engineering News, №1, vol. 92, Tbilisi. 2021. P. 29-31.
8. I. Berdzenishvili, K. Kamkamidze, E. Gvaramia. Provision of the operational reliability for the main pipeline. Scientific-practical conference dedicated to 90th anniversary of Professor Konstantine kamkamidze's birth „Digital Technologies: Today and Challenges“. Georgia, Tbilisi. 2018.
9. E. Kamkamidze, E. Gvaramia, E. Bochoridze. Alternative energy source - Ways to use hydrogen in electrical energy. Scientific-technical journal Energy. 1(85)/2018. Tbilisi 2018.
10. N. Beraia, E. Bochoridze, E. Gvaramia. Study of changes in the E-optimality property with simultaneous imposition of different errors on the components of simplex plans of the first and second orders. Modern Science: theoretical and practical view: materials of the VII International Scientific and Practical Conference (April 19, 2017): Collection of scientific papers / Scientific ed., PhD, prof. Rudakova I.A. – M: Publishing house «Pero », 2017, P.139-145. **(IF)**
11. N. Beraia, E. Bochoridze, E. Gvaramia. Investigation of changes in the A-optimality property with simultaneous imposition of different errors on the components of the simplex plan of the second order. Topical issues of modern science and education: Materials of the IV International Scientific and

Practical Conference (January 9, 2017.): Collection of scientific papers / Scientific ed., PhD, prof. Rudakova I.A. – M.: Publishing house «Pero», 2017, P.9-13.

12. N. Beraia, E. Bochoridze, E. Gvaramia. Investigation of changes in the orthogonality property of two-component simplex plans of the second order with the imposition of differing errors. In the world of scientific discoveries: Materials of the XXI International Scientific and Practical Conference (December 26, 2016): Collection of scientific papers / Scientific ed., PhD, prof. Akutina S. P. – M.: Publishing House «Pero», 2016, P.63-67.

13. N. Beraia, E. Bochoridze, E. Gvaramia. Changing the trace of the covariance matrix for a two-component simplex plan of the first order with the imposition of differing errors. Russia, Moscow: Publishing House "Pero". "Modern Science: a theoretical and practical view". Materials of the V International Scientific and Practical Conference (August 18, 2016): Collection of scientific papers / Scientific ed., PhD, prof. Rudakova I.A. – M.: Publishing house «Pero», 2016, P. 63-66.

14. E. Bochoridze, N. Beraia, E. Gvaramia. A change in the D-optimality property of a two-component simplex plan of the first order when different errors are imposed. Georgian Engineering News, №3, Tbilisi, 2016, P. 23-26.

15. N. Beraia, E. Bochoridze, E. Gvaramia. The influence of measurement errors on the property minimizing the maximum prediction variance for four-component simplex-lattice plans. Russia, M.: «Integration of science and practice in modern conditions». Materials of the III International Scientific and Practical Conference, February 28, 2015., P.105-113. **(IF)**

16. N. Gabashvili, T. Gabashvili, S. Kenchoshvili E. Gvaramia. Feasibility of using modern information technologies in the processing and management of projects. Academician I. International scientific conference dedicated to the 85th anniversary of frangishvili's birth. "Information and computer technologies, modeling, management", Works 2015. P. 188-190.

17. E. Kamkamidze, E. Gvaramia. Using the capabilities of computer graphics at the modern stage of teaching. Akaki Tsereteli State University. 2015. №3. 56-59.

18. M. Kiknadze, G. Kirtskhalia, E. Gvaramia. Computer network modeling using modeling technologies. Georgian Technical University, Georgian Academy of engineering, Business - engineering. 2015. P. 181-184.

19. N. Beraia,, E. Gvaramia, E. Bochoridze. The study of properties related to the accuracy of determining the coefficients of the regression equation for three-factor rotatable plans of the third order, taking into account the errors of measuring instruments. Russia, Moscow, IPU RAS, Proceedings of the XII All-Russian Meeting on Management Problems VSPU-2014, June 16-19, 2014, P.4408-4415. **(IF)**.

20. E. Kamkamidze, E. Gvaramia. Promising directions of telemedicine development. Georgian Technical University, , Georgian Academy of engineering, Business - engineering. 2014. P. 104-106.

## Conferences

1. Alexander Benashvili, Eka Gvaramia. Serial architecture - a modern trend in the field of interface development. 2025 Modern Challenges and Achievements in Information and Communication Technologies. IV International Scientific - Practical Conference.

2. A. Benashvili, E. Gvaramia, N. Tsiklauri. Parallelism in Modern Processors. International Scientific-Practical Conference Modern Challenges and Achievements in Information and Communication Technologies – 2024. "Technical University", November 1-2, 2024.

3. Zh. Gogiashvili, O. Namicheishvili, M. Kiknadze, E. Gvaramia, G. Acharadze. Parametric Regressions. The 15th Annual International Conference of the Union of Mechanics of Georgia. Batumi 29-31 August 2024.

4. A. Benashvili, E. Gvaramia. On the Issue of Choosing a Processor for a Computer System. International scientific-practical conference "Modern challenges and achievements in information and communication technologies-2023. Tbilisi, "Technical University". October 12-13, 2023.

5. M. Kiknadze, I. Makasarashvili, E. Gvaramia. Digital reconstruction system. International scientific-practical conference "Modern challenges and achievements in information and communication technologies-2023. Tbilisi, "Technical University". October 12-13, 2023.

6. A. Benashvili, E. Gvaramia, E. Bochoridze. MODIFICATION OF THE COMPUTER ARCHITECTURE BASED ON THE GALS INTERFACE. International Scientific and Practical Conference "Innovations and Modern Challenges 2022" dedicated to the 100th anniversary of the Georgian Technical University and the 65th anniversary of the Faculty of Informatics and Control Systems. Tbilisi, Technical University". November 18-19, 2022.

7. E. Bochoridze, E. Gvaramia, N. Jojua. Algorithms for processing and analyzing large volumes of data. XXX International scientific and practical conference, "Interaction of society and science: problems and prospects". London, England. June 15-18, 2021.

8. O. Namicheishvili, K. Kulijanovi, G. Acharadze. Deconvolutionary neural networks. XXXIV International Enlarged Sessions of the Seminar of Ilia Vekua Institute of Applied Mathematics. Tbilisi. 2021. April 21-23.

9. I. Berdzenishvili K. Kamkamidze, E. Gvaramia. Provision of the operational reliability for the main pipeline. Scientific-practical conference dedicated to 90th anniversary of Professor Konstantine kamkamidze's birth „Digital Technologies: Today and Challenges“. Georgia, Tbilisi. 2018 წ.

10. E. Kamkamidze, E. Gvaramia. Imitative models of Information Protection of the social network. V International Economic Conference-IEC. Models for the development of the national economy: Yesterday, today, tomorrow. 2017.

11. N. Beraia, E. Bochoridze, E. Gvaramia. Study of changes in the E-optimality property with simultaneous imposition of different errors on the components of simplex plans of the first and second orders. VII International Scientific and Practical Conference «Modern science: theoretical and practical view », Russia, Krasnodar, April 19, 2017.

12. N. Beraia, E. Bochoridze, E. Gvaramia. Investigation of changes in the A-optimality property with simultaneous imposition of different errors on the components of the simplex plan of the second order. IV International Scientific and Practical Conference «Topical issues of modern science and education». Russia, Sochi, January 9, 2017.

13. N. Beraia, E. Bochoridze, E. Gvaramia. Investigation of changes in the orthogonality property of two-component simplex plans of the second order with the imposition of differing errors. Russia, Krasnodar, XXI International Scientific and Practical Conference «In the world of scientific discoveries», December 26, 2016.

14. N. Beraia, E. Bochoridze, E. Gvaramia. Changing the trace of the covariance matrix for a two-component simplex plan of the first order with the imposition of differing errors. Россия, Таганрог, V International Scientific and Practical Conference «Modern science: theoretical and practical view». 18 августа 2016 г.

15. N. Beraia, E. Bochoridze, E. Gvaramia. The influence of measurement errors on the property minimizing the maximum prediction variance for four-component simplex-lattice plans. Russia, Taganrog, III International Scientific and Practical Conference « Integration of science and practice in modern conditions», February 28, 2015.

16. N. Gabashvili, T. Gabashvili, S. Kenchoshvili E. Gvaramia. Feasibility of using modern information technologies in the processing and management of projects. Academician I. International scientific conference dedicated to the 85th anniversary of frangishvili's birth. "Information and computer technologies, modeling, management". 2015.

17. E. Kamkamidze, E. Gvaramia. Using the capabilities of computer graphics at the modern stage of teaching. Second international economic conference. 2015.

18. N. Beraia, E. Gvaramia, E. Bochoridze. The study of properties related to the accuracy of determining the coefficients of the regression equation for three-factor rotatable plans of the third order, taking into account the errors of measuring instruments. Russia, Moscow, ИПУ РАН, All-Russian Meeting on Management Problems ВСПУ-2014, June 16-19, 2014.

## **Textbooks**

1. A. Benashvili, E. Gvaramia. Fundamentals of computer architecture and organization. 2nd edition. A collection of tests Tbilisi: Technical University. 2025. ISBN 978-9941-520-02-0. P. 137

2. A. Benashvili, E. Gvaramia. Fundamentals of computer architecture and organization. 2nd edition. Tbilisi: Technical University, 2023. ISBN 978-9941-28-968-2. P. 275.

3. N. Beraia, L. Tokadze, E. Gvaramia. „Computer literacy“. Manual. ISBN 978-9941-28-923-1. Tbilisi: „Technical University“, 2022. 297 P.
4. E. Bochoridze, E. Gvaramia, N. Jojua. User interface using the Django Framework. (Lecture course). GTU. 2020. CD-6177, P-123.
5. Z. Modebadze, E. Gvaramia. Cloud and grid technologies. Publishing House "Technical University". 2019. ISBN 978-9941-28-436-6. P. 146.
6. N. Beraia, E. Gvaramia, E. Bochoridze. Project Management Using MS Project 2013. Georgian Technical University, Tbilisi: 2017. P-138. 978-9941-20-776-1.
7. N. Beraia, E. Gvaramia, I. Karoian. Supplementary textbook, Fundamentals of working with databases (Access 2013). Georgian Technical University. Tbilisi, 2017. P.182. ISBN 978-9941-20-785-3.