



MIRZAYEV

Toxirjon Saloxetdinovich

Acting Associate Professor — Institute of Technology, Management and Communication, Department of Languages, Exact and Social Sciences

PERSONAL INFORMATION

Citizenship: Uzbekistan

Gender: Male

Academic degree: Candidate of Physical and Mathematical Sciences (PhD equivalent)

Specialty code: 01.01.05 — Probability Theory and Mathematical Statistics

CONTACT

Location: Namangan, Uzbekistan

Phone: (to be provided)

Email: (to be provided)

LANGUAGE PROFICIENCY

Uzbek — Native

Russian — A2

English — A2

DIGITAL SKILLS

Proficient in Microsoft Word and Microsoft Excel; confident user of Internet-based resources.

PRINCIPAL TEACHING SUBJECTS

Probability Theory and Mathematical Statistics; Mathematical Analysis; Economic and Mathematical Methods; Applied Mathematics I–II; Analytic Geometry; Differential Geometry; Differential Equations; Linear Algebra; Calculus; Methodology of Teaching Mathematics; Higher Mathematics.

PROFESSIONAL EXPERIENCE

2025–2026

Associate Professor

Tashkent TMU, non-state higher education institution — Department of Languages, Exact and Social Sciences

2024–2025

Senior Lecturer

Namangan State Pedagogical University — Department of Exact Sciences

2023–2024

Associate Professor

UBS, non-state higher education institution — Department of Management and Digitalization

2021–2023

Associate Professor

Namangan State University — Department of Higher Mathematics

2019–2021

Senior Lecturer

Namangan State University — Department of Differential Equations and Mathematical Physics

2018–2019

Head of Department

Namangan State University — Department of Differential Equations and Mathematical Physics

2015–2018

Senior Lecturer

Namangan State University — Department of Mathematics

2011–2015

Lecturer

Namangan State University — Department of Mathematics

2008–2011

Postgraduate Researcher

Research Institute of Mathematics and Information Technologies under the Academy of Sciences of the Republic of Uzbekistan — Department of Probability Theory and Mathematical Statistics

2006–2008

Mathematics Teacher

Academic Lyceum affiliated with Namangan State University

EDUCATION

2004–2006

Master's Degree — 5A460104, Probability Theory and Mathematical Statistics

Namangan State University

2000–2004

Bachelor's Degree — Mathematics

Namangan State University, Faculty of Physics and Mathematics

Education level: Higher education. Qualification stated in the diploma: Probability Theory and Mathematical Statistics.

ACADEMIC DEGREE AND DISSERTATION

In March 2012, he successfully defended his Candidate of Sciences dissertation in specialty 01.01.05 — Probability Theory and Mathematical Statistics.

Dissertation title: “Nonstandard Estimators of Parameters in Autoregressive Models and Investigation of Their Properties in Critical Cases.”

Scientific supervisor: Prof. A. N. Startsev, Doctor of Physical and Mathematical Sciences.

RESEARCH PROJECTS

2014–2016: Principal Investigator of Fundamental Research Project No. YOF4-FQ-0-73795 (YOF4-006), “Nonstandard Estimators of Parameters in Autoregressive Models and Investigation of Their Properties in Critical Cases.”

CURRENT RESEARCH AREA

Construction of regression and autoregressive models for economic problems and application of their properties.

ACADEMIC PROFILE

To date, he has published approximately 30 scientific and methodological works, most of them as a sole author. Six publications appeared in international journals (Russia), ten in journals included in the list of the Higher Attestation Commission of the Republic of Uzbekistan, and the remainder in proceedings of international and national scientific-practical conferences. In 2026, he published an article in an international journal indexed in Scopus (Q3). He is also the author of a textbook on Higher Mathematics.

EDUCATIONAL AND METHODOLOGICAL PUBLICATIONS

1. Higher Mathematics. Textbook. — Namangan, 2024.
2. Guidelines for Independent Study in Probability Theory and Mathematical Statistics. Methodological manual. — Namangan, 2021.

SELECTED SCIENTIFIC PUBLICATIONS AND CONFERENCE PAPERS

1. Conference paper. “A Standard One-Dimensional First-Order Autoregressive Model Close to the Critical Case.” New Theorems of Young Mathematicians–2013, Namangan, 2013, pp. 42–44.
2. Conference paper. “Limit Distribution of a Nonstandard Estimator Constructed for the AR(1) Model.” The 21st Century — The Age of the Intellectual Generation, Namangan, 6–7 June 2014, pp. 408–410.
3. Conference paper. “Limit Theorem for a First-Order Autoregressive Model.” The 21st Century — The Age of the Intellectual Generation, Namangan, 6–7 June 2014, pp. 410–412. Co-author: U. X. Mamadaliyev (50%).
4. Conference paper. “Cohomology of Solvable Leibniz Algebras with a Filiform Nilradical.” The 21st Century — The Age of the Intellectual Generation, Namangan, 6–7 June 2014, pp. 419–422. Co-author: U. X. Mamadaliyev (50%).
5. Conference paper. “Methodology for Multivariate Statistical Analysis of the Influence of Socio-Economic Factors on the Environmental Condition of Namangan Region.” Current Problems of Nature Use and Environmental Protection in the Fergana Valley, 6–7 June 2014.
6. Conference paper. “Methodology for Teaching Higher-Degree Algebraic Equations in Academic Lyceums and Vocational Colleges.” Republican Scientific-Practical Conference on Current Problems of Teaching Engineering Sciences in Labor and Vocational Education, Namangan, 2015, pp. 176–179.
7. Conference paper. “Limit Theorem for a Spatial Autoregressive Model.” New Theorems of Young Mathematicians–2022, Namangan, 2022, pp. 245–246. Co-authors: E. T. Umarov and G. B. Rasulova (50%).
8. Conference paper. “Limit Theorems for a Standard One-Dimensional First-Order Autoregressive Model: A Near-Critical Case.” New Theorems of Young Mathematicians–2022, Namangan, 2022, pp. 246–248. Co-authors: E. T. Umarov and G. B. Rasulova (50%).
9. Conference paper. “Methods for Estimating Unknown Parameters in Simultaneous Autoregressive Models.” Organization of Independent Learning in Teaching Exact Sciences: Problems, Solutions and Proposals, Namangan, 25 November 2024, pp. 164–167.
10. Conference paper. “A Standard One-Dimensional First-Order Autoregressive Model: A Case Close to Criticality.” Organization of Independent Learning in Teaching Exact Sciences: Problems, Solutions and Proposals, Namangan, 25 November 2024, pp. 170–173.
11. Article. “Limit Theorem for a First-Order Spatial Autoregressive Model with One Parameter.” Scientific Bulletin of Namangan State University, No. 8, 2021, pp. 13–16.
12. Article. “Application of Limit Theorems in Simultaneous Autoregressive Models.” Scientific Bulletin of University of Business and Science, No. 1, 2023, pp. 8–12.
13. Article. “Limit Distribution Functions of a Nonstandard Estimator of an Unknown Parameter in a One-Dimensional First-Order Autoregressive Model.” Scientific Bulletin of University of Business and Science, No. 1, 2023, pp. 24–33.

14. Article. "Application of the Central Limit Theorem to AR(1) Models." Scientific Bulletin of University of Business and Science, No. 2, 2023, pp. 7–13.
15. Article. "About an Approach to Parameter Estimate in a One-Dimensional Simultaneous Autoregressive Model with One Parameter." International Journal of Philosophical Studies and Social Sciences, Vol. 3, Issue 5 (2023), pp. 80–87.
16. Article. "Limiting Theorems of Parameters of Estimates of Simultaneous Autoregressive Model." Universal Journal of Mathematical Theory and Computer Sciences, Vol. 2, Issue 17 (2024).
17. Article. "Optimization of Plasticizer Concentration in Construction Composites through Mathematical Modeling." Universum: Chemistry and Biology, Issue 4(130), 2025, pp. 49–53. Co-authors: Zokirov Xolbek, Abdullayev Olim, Nozimov E'zozbek (30%).
18. Article. "Nonstandard Estimators in One-Dimensional and Spatial AR Models." Innovations in Science and Technologies, ISSN 3030-3451, No. 2/2025, pp. 275–283. Co-author: Qo'chqarova Sarvinoz Atamurodovna (50%).

INTERNATIONAL PUBLICATION INDEXED IN SCOPUS (Q3)

19. Xonkulov, U., & Mirzayev, T. (2026). Nonstandard Estimation Methods in One-Dimensional and Spatial First-Order Autoregression Models. Gulf Journal of Mathematics, 23(1), 1–12. DOI: 10.56947/92zfc18. (Scopus, Q3).