
Personal information

Name **Oleh Tonitsa**
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PROFESSIONAL AND ACADEMIC POSITIONS:

2003 to current Associate Professor of the Department of Computer Mathematics and Data Analysis, National Technical University "Kharkiv Polytechnic Institute";
2000 – 2003 Senior Lecturer, Department of Applied Mathematics, National Technical University "Kharkiv Polytechnic Institute";
1997 – 2000 Junior Researcher, Department of Applied Mathematics and Computational Methods, Institute for problems in Machinery named after A.M. Pidgorny of National Academy of Sciences of Ukraine
1994-1997 Post-Doctoral student, Department of Applied Mathematics and Computational Methods, Institute for problems in Machinery named after A.M. Pidgorny of National Academy of Sciences of Ukraine

EDUCATION:

Candidate of physical-mathematical sciences (June, 1999), Institute for problems in Machinery named after A.M. Pidgorny of National Academy of Sciences of Ukraine, Kyarkiv, Ukraine
Specialization: Applied Mathematics and Computation Methods
Specialist Degree (Specialist Degree (Electronic computing machines, systems, complexes and networks, 5 years) (June, 1994) Kharkiv State Technical University of Radio Electronics, Kharkiv, Ukraine
Concentrations: computer-aided design systems

COURSES TAUGHT

Extensive teaching at all university levels: Bachelor/Master/PhD:

- Higher mathematics (in English and Ukrainian),
- Computer discrete mathematics (in Ukrainian),
- Expert systems and knowledge bases (in Ukrainian),
- Social media models (in Ukrainian)

FIELDS OF RESEARCH INTEREST:

- Mathematical modeling,
- R-functions theory,
- Pattern recognition

SUMMARY OF CAREER ACHIEVEMENTS

- Prepared and published over 60 scientific papers and teaching aids in mathematics and computer science

PROFESSIONAL MEMBERSHIPS:

Member of the Academic Council of the Educational and scientific institute of computer sciences and information technologies of NTU "KhPI; Deputy Director of the Institute for work with contract students

RELATED PUBLICATIONS

Books

- Tonitsa O. Mathematical modeling by methods of conditional R-functions of physical fields, taking into account technical and technological tolerances: Innovative approaches to the development of technology and technology. Monograph. Book 2 - Odessa: Kuprienko SV, 2015. - pp. 125-136.

Papers

- Savchenko A., Galuza A., Protsay N., Tevyashtva O., Tonitsa O. Construction of a linear food quality classifier based on their color analysis. – 2021 11th International Conference on Advanced Computer Information Technologies, ACIT 2021 – Proceedings, 2021, p. 5-8
- Tonitsa O.V., Serdiuk I.V., Helyarovska O.A., Protsai N.T., Vasylets E.V. Probablistic model of ion flow across the membrane// Kharkiv: Bulletin of NTU "KhPI", 2022. - P. 123-129.
- Tonitsa O. Methods of stochastic modeling of physical and mechanical fields: Kharkiv: Bulletin of NTU "KhPI", 2019. - P. 34-39.
- Tonitsa O. Modeling of emergency forecasting system using neural networks: Barcelona: IV International Scientific and Practical Conference "Eurasians scientific congress", 2020 - P. 380-387
- Tonitsa O. Estimation of rounding errors in solving boundary value problems in mathematical physics: Kharkiv: V International Scientific and Practical Conference "Science, society, education: topical issues and development prospects", 2020 - P. 211-118.
- Tonitsa O. Analytical description of polygonal domains by methods of convex hulls, conditional R τ -functions and R $[0, \infty]$ –functions: International scientific periodical "Collection of scientific works SWorld" "Modern directions of theoretical and applied research" 2015 ". Issue 2 - Odessa: Scientific World, 2015. - P. 320 - 327.
- Tonitsa O. Conditional R-functions in problems of modeling domains of complex shape: Proceedings of the XI International Scientific and Practical Internet Conference "Modern Science on the Internet" 2015 ". - Kyiv: Meganom, 2015. - P. 44-50
- Tonitsa O., Melnichenko S. Emergency forecasting using neural networks: Bulletin of the National Technical University "KhPI". Collection of scientific works. - Kharkiv: NTU "KhPI". - 2011. – №35. – P. 95-101
- Tonitsa O., Yeremenko I. Computer modeling of security analysis systems of technological objects: Bulletin of the National Technical University "KhPI". Collection of scientific works. - Kharkiv: NTU "KhPI". - 2010. – № 67. – P. 45-50