

Curriculum Vitae of Dr. Samoylov Alexey

1. Personal details

Full Name	Dr. Samoylov Alexey, (surname Samoylov name Alexey)
Organisation	Southern Federal University, Rostov-on-Don, Russian Federation
Role	Head of the Department of Computer Engineering

2. Qualifications

Degree/award	Year	Discipline/field	Organisation and country
PhD, Candidate of Technical Sciences	2007	Elements and devices of computer technology and control systems	Southern Federal University, Rostov-on-Don, Russian Federation
Postgraduate study	From 2004 till 2007	Elements and devices of computer technology and control systems	Southern Federal University, Rostov-on-Don, Russian Federation
Specialty	From 1998 till 2003	Automated information processing and control systems	Taganrog State Radio Engineering University, Taganrog, Russian Federation

3. Current and previous appointment(s)/position(s) in the past 10 years

Position held	Organisation	Department/Centre	Year appointed	Year completed
Head of the Department of Computer Engineering	Southern Federal University, Rostov-on-Don, Russian Federation	Institute of Computer Technologies and Information Security	2017	Till present time
Deputy Director for Scientific and International Activities	Southern Federal University, Rostov-on-Don, Russian Federation	Institute of Computer Technologies and Information Security	2014	Till present time
Associate Professor	Southern Federal University, Rostov-on-Don, Russian Federation	Institute of Computer Technologies and Information Security	2009	2017
Director	Southern Federal University, Rostov-on-Don, Russian Federation	Center for Distance Education Technologies at the Faculty of Continuous Forms of Education	2009	2013
Assistant of the Department of System Analysis and Telecommunications	Southern Federal University, Rostov-on-Don, Russian Federation	Institute of Computer Technologies and Information Security	2007	2009

4. Role on the project

- Project participant from the Russian side.
- Organizational support of the project.
- Development and application, within the framework of the project, of methods for building career trajectories for community members (people) who perform data markup and formation of training samples.
- Development of a program and methodology for conducting experimental studies, analysis of research results and development of recommendations for their application.

- Development of the concept and architecture of a distributed system for the formation of training samples by communities, including groups of people and artificial intelligence systems.
- Writing report/research papers/presentations for the project.

5. Expertise and contribution to project

- Dr. Samoylov Alexey has experience in managing and participating in scientific grants of various levels.
- Dr. Samoylov Alexey proficient in research methods and search, analysis and decision-making tools.
- Dr. Samoylov Alexey has experience in developing algorithmic and software for intelligent systems.
- Dr. Samoylov Alexey owns methods of conducting scientific experiments.

6. Evidence of research impact and contributions to the field

- Dr. Samoylov Alexey has experience in managing and participating in scientific grants of various levels.
- The area of scientific research of Dr. Alexey Samoylov is the methods of building problem-oriented automated and information systems, including intelligent ones, which is confirmed by publications and grants.
- Dr. Samoylov Alexey participated in the scientific project development and research of principles for constructing models of interaction between actors and groups of actors based on indirect signs, within which he developed an algorithm for extracting open data from social networks.
- Dr. Samoylov Alexey has a number of certificates of state registration of computer programs for working with data.

7. Ongoing and completed national and international projects

No.	Project Title	Sponsoring Agency	Budget	Status
1	Development and research of principles for the construction of adaptive high-performance intelligent computing systems for uninhabited mobile robotic platforms for collective collection and processing of information about a multidimensional problem environment	Ministry of Education and Science of Russia Federation, 2018-2019	12000000 rub	Completed
2	Development and research of constructing principles for models of actors and group of actors interaction on the basis of indirect characteristics	Russian Foundation for Basic Research, 2018-2020	2100000 rub	Completed
3	Research and development of quantum algorithms for image detection and recognition in the environment of the hardware-software modular simulator of quantum computers	Russian Foundation for Basic Research, 2019-2021	3000000 rub	Completed
4	Development of a method for photogrammetric measurement of geometric parameters of objects that are invariant to a photo (scientific grant supervising)	Russian Foundation for Basic Research, 2019-2021	3000000 rub	Completed
5	Research and development of methods for detecting and correcting quantum types of errors for modeling quantum computing	Russian Foundation for Basic Research, 2020-2022	3683000 rub	Completed
6	Development of specialized methods for constructing digital analysis systems and data processing algorithms for perimeter security tasks	Russian Foundation for Basic Research, 2020-2022	3683000 rub	Completed

7	Grant of the Ministry of Education and Science of the Russian Federation in the form of a subsidy for the development of bachelor's and master's degree programs in the profile "artificial intelligence"	Ministry of Education and Science of Russia Federation, 2021-2023	35000000 rub	In the process of execution
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8. Career-best and most relevant publications

1	2022	Monitoring the movement of security modules in the perimeter security system. Quarterly peer-reviewed, refereed scientific journal "Bulletin of ASU". Issue 3 (306), 2022 pp. 63-68 DOI:10.53598/2410-3225-2022-3-306-63-68
2	2021	Research of Quantum Neural Networks and Development of a Single-qubit Model of Neuron. ACM International Conference Proceeding Series. p. 381-385, 25th Pan-Hellenic Conference on Informatics, PCI 2021. DOI 10.1145/3503823.3503893 (Scopus)
3	2021	A method for constructing photogrammetric measuring systems based on mobile cloud computing. The magazine "Izvestia SFU. Technical Sciences" N4 2021 Publisher: Southern Federal University (Rostov-on-Don) issn: 2311-3103 pp. 166-174. DOI 10.18522/2311-3103-2021-4-166-174
4	2021	An algorithm for the formation of a photogrammetric measuring system based on primary input data. Quarterly peer-reviewed, refereed scientific journal "Bulletin of ASU". Issue 2 (281), 2021 pp. 82-89
5	2021	The use of mobile cloud systems for non-contact measurement of geometric parameters of industrial products and raw materials. In the collection: System synthesis and applied synergetics. Collection of scientific papers of the X All-Russian Scientific Conference, Nizhny Arkhyz, 2021. DOI: 10.18522/syssyn-2021-40 pp. 231-236.
6	2021	Ontological representation of photogrammetric methods for solving problems of determining geometric parameters of objects from preprocessed digital images. Bulletin of the Adygea State University. The series "Natural-mathematical and technical sciences". Maykop: Publishing House of ASU, 2020. Issue 3 (266). pp. 34-39
7	2020	The system of metrics for assessing and predicting the interaction of a social network users. International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM Volume 2020-August, Issue 2.1, 2020, Albena; Bulgaria. Pages 389-394. DOI: 10.5593/sgem2020/2.1/s07.050 (Scopus)
8	2020	The ontology-based methodology for determining the objects' geometric parameters from pre-processed digital images for applied photogrammetry. International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM Volume 2020-August, Issue 2.1, 2020, Albena; Bulgaria. Pages 381-388. DOI: 10.5593/sgem2020/2.1/s07.049 (Scopus)
9	2020	The methods for processing and storage of data in global navigation satellite systems for the task of perimeter protection. E3S Web of Conferences. Volume 224, 23 December 2020. DOI:10.1051/e3sconf/202022402032 (Scopus)
10	2020	A method and a distributed inductive machine learning procedure of a photogrammetric algorithm for solving problems of determining geometric parameters of objects from preprocessed digital images. Electronic scientific journal Engineering Bulletin of the Don, N12 (2020), ivdon.ru/ru/magazine/archive/n12y2020/6722
11	2020	The use of some plausible reasoning schemes to identify personality traits in the Network. Quarterly peer-reviewed, refereed scientific journal "Bulletin of ASU". Issue 2 (261) 2020 pp. 32-39
12	2019	Mobile-cloud data processing system on digital images. IEEE International Conference on Industrial Informatics (INDIN). Volume 2019-July, July 2019, Paper number 8972161, Pages 1674-1678 17th IEEE International Conference on Industrial Informatics, INDIN 2019; Helsinki-Espoo; Finland. DOI: 10.1109/INDIN41052.2019.8972161 (Scopus)
13	2019	Studying the Schrödinger Equation, Implementation of Qubits and Visualization of Matrices Using Matlab. Advances in Intelligent Systems and Computing Volume 984, 2019, Pages 275-282. 8th Computer Science On-line Conference, CSOC 2019; Prague, Czech Republic 24 April 2019 - 27 April 2019. DOI: 10.1007/978-3-030-19807-7_27 (Scopus)
14	2019	The quantum computer model structure and estimation of the quantum algorithms complexity. Advances in Intelligent Systems and Computing, Volume 859, 2019, Pages 307-315. DOI: 10.1007/978-3-030-00211-4_27 (Scopus)
15	2019	An approach to obtaining high-resolution digital images using a mobile device camera. In the collection: System synthesis and applied synergetics. Collection of scientific papers of the IX All-Russian Scientific Conference, Nizhny Arkhyz, September 24-27, 2019. pp. 346-351.
16	2019	Algorithmic support of intelligent digital image processing system for applied photogrammetry tasks. Quarterly peer-reviewed, refereed scientific journal "Bulletin of ASU". Issue 3 (246) 2019 pp. 96-102
17	2018	Methodology of big data integration from a priori unknown heterogeneous data sources. ACM

		International Conference Proceeding Series 8 December 2018, Pages 131-135 2nd International Conference on Computer Science and Artificial Intelligence, CSAI 2018; Shenzhen; China; 8 December 2018 - 10 December 2018. DOI: 10.1145/3297156.3297249 (Scopus)
18	2018	The approach for obtaining indirect characteristics of interactions between actors from open data of social networks. International Multidisciplinary Scientific Geo Conference Surveying Geology and Mining Ecology Management, SGEM Volume 18, Issue 2.1, 2018, Pages 773-780 18th International Multidisciplinary Scientific Geoconference, SGEM 2018; Albena; Bulgaria; 2 July 2018 - 8 July 2018 (Scopus)
19	2017	Review and analysis of means and methods for automatic data extraction from heterogeneous sources. Proceedings of the iv international research conference information technologies in science, management, Social sphere and medicine (ITSMSSM 2017). Tomsk, RUSSIA. ISSN: 2352-538X; ISBN: 978-94-6252-432-3 (Web of Science)
20	2017	Temporal coordination in planning the actions of groups of objects in real operational time. KubGAU Scientific Journal, N134(10), 2017. http://ej.kubagro.ru/2017/10/pdf/72.pdf
21	2017	Review and analysis of machine learning methods. Collection of articles of the III All-Russian Scientific and Technical Conference of Young Scientists, Postgraduates and Students, 2017 - Vol. Part II: Fundamental and applied aspects of computer technology and Information Security Southern Federal University. pp. 155-158;
22	2017	Generalization of situation graphs based on a convolution search algorithm for situational control problems. The magazine "Izvestia SFU. Technical Sciences", N 3 (188), 2017, pp. 111-121. Publishing house: Federal State Autonomous Educational Institution of Higher Education Southern Federal University
23	2017	Semantic Web Search Engines. Journal "Informatization and communication" N3 2017 Publishing house: Editorial board of the journal "Informatization and Communication" (Moscow) ISSN: 2078-8320
24	2016	Search and ranking of knowledge in the semantic web. KubGAU Scientific Journal, N123(09), 2016 http://ej.kubagro.ru/2016/09/pdf/41.pdf
25	2016	On approaches to the recognition and identification of a person by digital images in the tasks of ensuring public safety. KubGAU Scientific Journal, N123(09), 2016 http://ej.kubagro.ru/2016/09/pdf/42.pdf
26	2016	Ranking of ontologies in the Semantic Web. Journal "Informatization and communication" N3 2016 Publishing house: Editorial board of the journal "Informatization and Communication" (Moscow) ISSN: 2078-8320
27	2016	Cognitive architecture of agents of a multi-agent system. Journal "Informatization and Communication" N2 2016 Publishing house: Editorial board of the journal "Informatization and Communication" (Moscow) ISSN: 2078-8320
28	2015	Bionic search for solutions to design problems. The magazine "Izvestia SFU. Technical Sciences" N7 2015 Publisher: Southern Federal University (Rostov-on-Don) ISSN: 1999-9429; eISSN: 2311-3103
29	2015	Review and analysis of existing data storage solutions for information systems with a flexible structure. Technologies for the development of information systems TRIS-2015. Collection of articles of the International Scientific and Practical Conference. Research Institute of Modeling and Design of Information Systems, Southern Federal University. 2015 Publisher: Southern Federal University (Rostov-on-Don);
30	2014	Flexible database for configurable information systems: The relational approach. 8th IEEE International Conference on Application of Information and Communication Technologies, AICT 2014; Astana; Kazakhstan; 15 October 2014 through 17 October 2014; Category number CFP1456H-PRT; Code 112596 (Scopus)
31	2014	The method of constructing the structures of configurable automated system for measuring volume of roundwood. Information and Communication Technology for Education Volume I, - 2014. Published by WIT Press Ashurst Lodge, Ashurst, Southampton, SO40 7AA, UK (Scopus)