Curriculum Vitae of Postgraduate student/assistant Alexander Kozlovskiy

1. Personal details

| Full Name | Postgraduate student/assistant Alexander Kozlovskiy (surname Kozlovskiy name Alexa | |
|--------------|--|--|
| Organisation | Southern Federal University, Rostov-on-Don, Russian Federation | |
| Role | Postgraduate student/assistant | |

2. Qualifications

| Degree/award | Year | Discipline/field | Organisation and country |
|------------------------|-----------------------------------|--|--|
| Postgraduate study | From 2019 till present time | Computer science and engineering/ System analysis, information management and processing, statistics | Southern Federal University, Rostov-on-Don, Russian Federation |
| Master's Degree course | From 2017 till 2019 | Computer science and engineering | Southern Federal University, Rostov-on-Don, Russian Federation |
| Bachelor course | From 2013 till 2017 | Computer science and engineering | Southern Federal University, Rostov-on-Don, Russian Federation |

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

| Position held | Organisation | Department/Centre | Year appointed | Year completed |
|---|--|---|-------------------|-------------------|
| An employee of the organization and support service of the rector's office is an assistant to the rector. | Southern Federal University, Rostov-on-Don, Russian Federation | Institute of Computer Technologies and Information Security | 2022 | Till present time |
| Head of the Distillery Mobile and Web Application Development Laboratory. | Southern Federal University, Rostov-on-Don, Russian Federation | Institute of Computer Technologies and Information Security | 2020 | Till present time |
| Assistant of the Department of Computer Engineering | Southern Federal University, Rostov-on-Don, Russian Federation | Institute of Computer Technologies and Information Security | 2019 | Till present time |
| Programmer | Southern Federal University, Rostov-on-Don, Russian Federation | Institute of Computer Technologies and Information Security | 2019 | 2022 |
| Head of the Laboratory of Intelligent Computing Systems (Computer Vision) | Southern Federal University, Rostov-on-Don, Russian Federation | Institute of Computer Technologies and Information Security | 2017 | 2022 |

4. Role on the project

- Project participant from the Russian side.
- Conducting an analysis of open sources on the research topic in terms of distributed registry technologies and distributed generation of training set.
- Conducting a patent search on the research topic in terms of distributed registry technologies and distributed generation of training set.
- 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 algorithmically implemented methods for organizing distributed data markup, assuming consensus among community members (people and artificial intelligence systems) when marking up each instance of data
- Development of algorithmically implemented, consensus-based methods for the formation and verification of training samples based on distributed labeled data by communities, including people and artificial intelligence systems.

5. Expertise and contribution to project

- Postgraduate student/assistant Alexander Kozlovskiy has experience of participating in scientific projects of various levels as a performer.
- Postgraduate student/assistant Alexander Kozlovskiy proficient in research methods and search, analysis and decision-making tools.
- Postgraduate student/assistant Alexander has experience in developing algorithmic and software for intelligent systems.
- Postgraduate student/assistant Alexander Kozlovskiy is a specialist in the field of machine learning.

6. Evidence of research impact and contributions to the field

- Postgraduate student/assistant Alexander Kozlovskiy has experience in participating in scientific grants of various levels as a performer.
- The area of scientific research of postgraduate student/assistant Alexander Kozlovskiy is the methods of building problem-oriented automated and information systems including intelligent ones and data mining methods, which is confirmed by publications and grants.
- During the implementation of the scientific project, he was one of the developers of the open-source analysis software module based on machine learning technology.
- The topic of the dissertation for the degree corresponds to the research topic of the scientific project.
- Postgraduate student/assistant Alexander Kozlovskiy a number of certificates of state registration of computer programs for working with data.
- Postgraduate student/assistant Alexander Kozlovskiy is a member of the Council of Young Scientists and Specialists of the Rostov region of the VII convocation.

7. Ongoing and completed national and international projects

| No. | Project Title | Sponsoring Agency | Budget | Status |
|-----|---|--|--------------|-----------------------------|
| 1 | Research and development of principles for building a quantum computing simulation system with built-in hardware support | Russian Foundation for Basic Research, 2020-2022 | 3500000 rub | Completed |
| 2 | 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 |
| 3 | 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 |

8. Career-best and most relevant publications

| 1 | 2023 | The system of recognition of the state government in the video stream using neural networks and other methods of mass education// Education of Tula State University, Technical Sciences, issue 2, UDC 004.891, DOI: 10.24412/2071-6168-2023-2-77-82 |
|----|------|---|
| 2 | 2023 | An approach to conducting a conversation with an intelligent assistant // Online conference on Computer science (Scopus, appendix to the recording). |
| 3 | 2023 | Registration of the computer program "Open-source analysis software module based on machine learning technology". Certificate No. 2023610985 on state registration. |
| 4 | 2022 | Registration of the computer program "Neural network module for recognizing and counting objects on a given territory". Certificate No. 2022664725 on state registration. |
| 5 | 2022 | Registration of the computer program "Software neural network module for monitoring the time spent by public transport at bus stops". Certificate No. 2022664725 on state registration. |
| 6 | 2022 | Development of a high-performance method for determining geometric parameters for determining objects in an image * Izhevsk, South Ural University, Technical Sciences, issue 5, pp. 86-97 UDK 004.896 DOI 10.18522/2311-3103-2022-5-86-97 |
| 7 | 2022 | On the approach to the generation of a plot-related text / Proceedings of Tula State University. Technical Sciences, N9, pp.160-167. DOI: 10.24412/2071;6168-2022-9-160-168 |
| 8 | 2022 | Development of a contactless system for measuring geometric parameters of objects in the image * Proceedings of Tula State University, Technical Sciences, issue 9, pp.177-182. UDC 004.896 DOI: 10.24412/2071;6168-2022-9-177-182 |
| 9 | 2022 | Intelligent system of non-contact biological monitoring and forecasting for water transport * Due to Tula State University, Technical Sciences, issue 2, UDC 621.833 DOI: 10.24412/2071;6168-2022-2-103-110 |
| 10 | 2021 | Redundant labeling of distributed data in conditions of decentralized storage of training datasets for the Fog-and-Edge robotic environment // Lecture notes on networks and systems, volume 231, pp. 555-567. https://doi.org/10.1007/978-3-030-90321-3_46; (Scopus) |
| 11 | 2021 | Registration of the computer program "Library of components for the organization of recognition and accounting of objects in monitoring systems". Certificate No. 2021662746 about the state. |
| 12 | 2021 | Registration of the computer program "Program module of identification of the person" Certificate N 2021612379 about the state. |
| 13 | 2021 | Method of photogrammetric measurement of geometric parameters of objects invariant to photo-recording devices* Bulletin of the Adygea State University. Series 4: Natural-mathematical and technical sciences. UDC 004.4:528.71+004.3'142:621.317.752, DOI: 10.53598 / 2410-3225-2021-4-291-58-69 |
| 14 | 2021 | Development of an expert system for selecting directions for applicants to the master's program. News of TulSU. Technical sciences. Issue 12 of UDC 004.7 DOI: 10.24412/2071;6168-2021-12-480-487. |
| 15 | 2020 | Development of a scheme of a hardware accelerator of quantum computing for correction quantum types of errors// Advances in Intelligent Systems and Computing, vol 1294, pp.64-73. DOI:10.1007/978-3-030-63322-6_5 |
| 16 | 2020 | Registration of the computer program "Software simulator for Markov models". Certificate N 2020662652 about the state. |
| 17 | 2020 | Registration of the computer program "Software simulator for building and modeling quantum neural networks". Certificate N 2020665458 about the state. |
| 18 | 2020 | Registration of the computer program "Software simulator for the quantum walk algorithm". Certificate N 2020662971 about the state. |
| 19 | 2019 | Algorithmic support of intelligent digital image processing system for applied photogrammetry tasks* Bulletin of the Adygea State University. Series 4: Natural-mathematical and technical sciences. N 3 (246). p. 96;102. (In the list of the Higher Attestation Commission) |