

Brief information about the project

Name of the project	AP15473408 «Development of models and methods for extremist content detecting in social networks»(0122PK00930).
Relevance	Today, social networks have become an integral part of human life. Social networks are used not only for educational purposes, but also to promote the ideas of extremism. Using new information technologies, extremist organizations attract new members to the group online, plan and carry out extremist activities, conduct training, exchange confidential information in the management and coordination of socially dangerous activities, ideological propaganda, etc. That is, it is necessary to develop measures to ensure national security in line with current trends in the development of information and communication technologies, in particular, to organize measures to counter the growth of extremism and terrorism.
Purpose	The purpose of the project is comprehensive studying and development of a model and method of detecting extremist texts in the Kazakh and Russian languages in social networks. The created model is based on multi-class classification of texts on political extremism, separatism, religious extremism, etc.
Objectives	The objectives of the project are as follows: 1) Creation of a corpus of extremist texts to identify extremist texts in Kazakh and Russian in social networks; 2) Multiclass classification of extremist texts on social networks and the use of texts on political extremism, separatism, religious extremism, etc. create a sorting model. 3) Development and research of methods for detecting accounts that disseminate malicious information in social networks; 4) Development and testing of software for detecting extremist texts in the Kazakh language on web resources based on the developed model and methods.
Expected and achieved results	It is expected that the postdoctoral student will receive the following results at the entire stage of the project: - At least 3 (three) articles will be published in journals and (or) other domestic peer-reviewed scientific publications recommended by the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan (CCSES). - A corpus of extremist texts will be compiled to identify extremist texts in Kazakh and Russian on social networks; - There will be developed a model for classifying extremist texts on social networks, classifying class and sorting texts on political extremism, separatism, religious extremism and others.

	<p>It will be developing methods to identify accounts that distribute malicious information on social networks.</p> <p>On the basis of the developed model and methods will be developed software to detect extremist texts in the Kazakh language on web resources.</p> <p>Target consumers of the obtained results - fundamental results will be used by the world scientific community, methodologies, algorithms, applied results in the form of prototypes will be used by ensuring information security, critical infrastructure, competent authorities to prevent Internet extremism</p>
<p>Research team members with their identifiers (Scopus Author ID, Researcher ID, ORCID, if available) and links to relevant profiles</p>	<p>1. Bagitova Kalamkas Bagitovna, PhD, Hirsch Index – 2, ORCID 0000-0003-1587-1995, Scopus Author ID 57220743797.</p> <p>2. Musiralieva Shynar Zhenisbekovna, Candidate of Physical and Mathematical Sciences, Hirsch Index – 7, https://orcid.org/ 0000-0001-5794-3649 Scopus Author ID: 57202216979</p>
<p>List of publications with links to them</p>	<p>1. М.А. Болатбек, К.Б. Багитова, Ш.Ж. Мусиралиева. Киберқауіпсіздік мәселелерін табиғи тілді өңдеу әдістері арқылы шешу тақырыбына жүйелік шолу. № 3 (2022): Известия НАН РК. Серия информатики, стр. 52-70, https://journals.nauka-nanrk.kz/physics-mathematics/article/view/4690</p> <p>2. М.А. Болатбек, К.Б. Багитова, Ш.Ж. Мусиралиева, А.Т. Нюсупов, Е. Абайұлы. Веб-ресурстардағы фишингтік хабарламалар және оларды машиналық оқыту әдістері арқылы анықтау. №4 (2022): Известия НАН РК. Серия информатики. https://journals.nauka-nanrk.kz/physics-mathematics/article/view/4789</p> <p>3. Kalamkas Bagitova, Shynar Mussiraliyeva, Daniyar Sultan. Social Media Mining to Detect Online Violent Extremism using Machine Learning Techniques. (IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 14, No. 6, 2023 1384 - 1893 p., (procentile 44), DOI: 10.14569/IJACSA.2023.01406146. http://dx.doi.org/10.14569/IJACSA.2023.01406146</p> <p>4. Багитова К.Б., Мусиралиева Ш.Ж, Болатбек М.А, Оспанов Р.К. Разработка программного обеспечения ExWeb для выявления экстремистского контента в сети Интернет. «Известия НАН РК. Серия физика и информатики». ISSN 2518-1726 (Online), ISSN 1991-346X (Print). SERIES PHYSICS AND INFORMATION TECHNOLOGY 2 (346) APRIL – JUNE 2023. Стр. 81 – 95. DOI: https://doi.org/10.32014/2023.2518-1726.186. https://journals.nauka-nanrk.kz/physics-mathematics/article/view/5414</p>
<p>Patents</p>	<p>-</p>