



საქართველოს მეცნიერებათა ეროვნული აკადემია



პერსონალური მონაცემები (CV)

გვარი	იავიჩი	სახელი	მაქსიმ
მისამართი (სამსახურის)	პაატა სააკადის 1, თბილისი 0102	დაბადების თარიღი და ადგილი	26.04.1985 თბილისი, საქართველო
მოქალაქეობა	საქართველო	სამსახურის ტელეფონი	+995595511355
ელ.ფოსტა	miavich@cu.edu.ge		

1. განათლება

სასწავლებლის დასახელება	სწავლის წლები
საქართველოს ტექნიკური უნივერსიტეტი, დოქტორი	2010-2013
ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი, მაგისტრი	2006-2009
ივანე ჯავახიშვილის სახელობის თბილისის სახელმწიფო უნივერსიტეტი, ბაკალავრი	2001-2005

2. სამეცნიერო ან აკადემიური ხარისხი

	ორგანიზაციის დასახელება	მინიჭების თარიღი
საკანდიდატო დისერტაცია		
სადოქტორო დისერტაცია	საქართველოს ტექნიკური უნივერსიტეტი	05.07.2013
აკადემიური დოქტორი		

3. აკადემიის წევრად არჩევა, სტიპენდიატი

	არჩევის თარიღი
აკადემიის წამდვილი წევრი	
აკადემიის წევრ-კორესპონდენტი	23.07.2025
აკადემიის სტიპენდიატი	

4. სამსახურებრივი გამოცდილება (საზღვარგარეთ გრძელვადიანი ვიზიტების ჩათვლით)

თარიღი	დაწესებულების დასახელება	თანამდებობა
01.03.2025-დღემდე	სსიპ - განათლების ხარისხის განვითარების ეროვნული ცენტრი	აკრედიტაციის საბჭოს წევრი

01.01.2022-დღემდე	კავკასიის უნივერსიტეტი	კიბერუსაფრთხოების ცენტრის დირექტორი
14.05.2019-დღემდე	კავკასიის უნივერსიტეტი	კომპიუტერული მეცნიერებისა, კიბერ უსაფრთხოების საბაკალავრო პროგრამების და ინფორმაციული ტექნოლოგიების მენეჯმენტის სამაგისტრო პროგრამის ხელმძღვანელი
01.09.2018-დღემდე	შოთა რუსტაველის ეროვნული სამეცნიერო ფონდი	ექსპერტი
10.09.2017-დღემდე	სამეცნიერო კიბერ უსაფრთხოების ასოციაცია	აღმასრულებელი დირექტორი და პრეზიდენტი
02.09.2015-დღემდე	კავკასიის უნივერსიტეტი	პროფესორი, კიბერ უსაფრთხოების მიმართულების ხელმძღვანელი
2020-2025	სსიპ - განათლების ხარისხის განვითარების ეროვნული ცენტრი	ექსპერტი
2016-2021	საქართველოს ტექნიკური უნივერსიტეტი	მოწვეული პროფესორი
2014-2018	ეკონომიკური სკოლა	საერთაშორისო ბაკალავრიატის ICT მასწავლებელი
2014-2018	საქართველოს ბანკის უნივერსიტეტი	ასოცირებული პროფესორი; პროგრამის ხელმძღვანელი
2011-2014	საქართველოს ტექნიკური უნივერსიტეტი	მოწვეული ლექტორი
2009-2014	Maalot Zeidner-ის ინსტიტუტი	ლექტორი
2009-2016	მაქსიტოპი	ინჰინირობის/დამფუძნებელი

4.1 პედაგოგიური მოღვაწეობა

თარიღი	დაწესებულების დასახელება	თანამდებობა
2015-დღემდე	კავკასიის უნივერსიტეტი	პროფესორი, კიბერ უსაფრთხოების მიმართულების ხელმძღვანელი
2014-2018	ეკონომიკური სკოლა	საერთაშორისო ბაკალავრიატის ICT მასწავლებელი
2011-2014	საქართველოს ტექნიკური უნივერსიტეტი	მოწვეული ლექტორი
2009-2014	Maalot Zeidner-ის ინსტიტუტი	ლექტორი

5. სამეცნიერო ინტერესები

კიბერუსაფრთხოება, კრიპტოგრაფია, პოსტ-კვანტური კრიპტოგრაფია, ხელოვნური ინტელექტი, 5G უსაფრთხოება, მათემატიკური მოდელები

6. ძირითადი სამეცნიერო პუბლიკაციები

1. Tkhelidze M. G., Misheladze C. G., Iavich M.P. The concept of teaching information technology in primary school and pre-school age. Ylmimetodik jurnal, 2010, 3, Baku: p. 37-44
2. Iavich M.P., Bibiluri M.V., To the method of preparation and arranging computer science lessons in primary school. Baku: Elmimetodik jurnal, 2011, 3, p.68-72.
3. Tkhelidze M. G., Iavich M.P. About methods of teaching information technology in the preschool and elementary school. Intelect 1(39), p. 123-125.
4. Iavich M.P., Computer technology is a means of intellectual development. Journal of actual problems of modern science, № 6, 2012, p. 364-366.
5. Iavich M.P., The concept of creation of intellectual computer games for preschool children. Engineering in Russia and abroad (II): Proceedings of the international. scientific. Conf. (Moscow, November 2012),2012, p. 163-165.
6. Iavich M.P., The concept of creation of intellectual computer science materials for preschool children. Engineering in Russia and abroad (II): Proceedings of the international. scientific. Conf. (Moscow, November 2012, 2012. — p. 162-163.
7. Iavich M.P., Bibiluri M.V., Data pre-school education. Teaching computer literacy of children younger classes. Georgian Technical University. GESJ: Education: Science and Psychology 2012 | N.2(21).
8. Gurtskaya P.A., Iavich M.P., On the question of the course of computer science and ICT in primary school Georgian Technical University. GESJ: Education Science and Psychology 2012 | N.2(21).
9. Iavich M.P., Theoretical foundations of computer science. Concept creation of e-learning tools and intellectual computer games for children. Moscow State University named after Lomonosov. International scientific practical conference. Moscow:2012, c. 163-165.
10. Iavich M.P. Electronic textbook: advantages and disadvantages // Modern scientific researches and innovations. 2012. № 10

- [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2012/10/16884>
11. Iavich M.P. Some Particularities of the IST and Computer Technologies Use in the Preschool and Primary School Education // Modern scientific researches and innovations. 2013. № 1 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2013/01/19788>
 12. Iavich M.P. Using fonts theory when making electronic text book // Modern scientific researches and innovations. 2013. № 5 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2013/05/24104>
 13. Iavich M.P. Using color theory when making electronic text book // Modern scientific researches and innovations. 2013. № 5 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2013/05/24076>
 14. Gurtskaia P.A., Iavich M.P. Pupils distribution by group in educational social network // Modern scientific researches and innovations. 2013. № 5 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2013/05/24658>
 15. Iavich M.P. Concepts and training programs for students of middle and high school age // Modern scientific researches and innovations. 2013. № 6 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2013/06/25261>
 16. M. Iavich, სოციალურ ქსელმი სწავლების ეფექტურობის მათემატიკური მოდელირება, The mathematical model of education efficiency in social networks, Intelect", 2013, N 2(46)
 17. Iavich M.P., Popova D.S. Using Q basic in children teaching // Modern scientific researches and innovations. 2013. № 6 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2013/06/24665>
 18. Iavich, M. Mathematical Model of Social Educational Networks. J Math Sci 216, 553–557 (2016). <https://doi.org/10.1007/s10958-016-2913-z>
 19. Iavich M.P., Iashvili G.U. A comparison of websites optimizing processes in search engines using PHP and HTML // Modern technics and technologies. 2014. № 3 [Electronic journal]. URL: <http://technology.s nauka.ru/en/2014/03/3233>
 20. Iavich M.P., Isaev P.D. Problems associated with the creation of the own cryptosystems // Modern scientific researches and innovations. 2014. № 4. P. 1 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2014/04/33150>
 21. Iavich. M., Bibiluri M.; The task of carrying the limit equations theory in infinite environment, for Young Scientists Conference, Tbilisi, 2015 , May, 14–15.
 22. Iavich M.P., Pirtskhalava I.Z. Captcha development problems // Modern technics and technologies. 2015. № 7 [Electronic journal]. URL: <http://technology.s nauka.ru/en/2015/07/7577>
 23. Iavich M.P., Samushia N.P., Tavberidze G.A. Simulation of computer game positive influence on educational process // Modern scientific researches and innovations. 2016. № 3 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2016/03/64576>
 24. Gagnidze A.G., Iavich M.P., Iashvili G.U. Post-quantum cryptosystems // Modern scientific researches and innovations. 2016. № 5 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2016/05/67264>
 25. M. Iavich, Mathematical Model of Social Educational Networks, Springer US, Journal of Mathematical Sciences, July 2016, Volume 216, Issue 4, pp. 553-557; http://link.springer.com/article/10.1007/s10958-016-2913-z?wt_mc=Internal.Event.1.SEM.ArticleAuthorAssignedToIssue
 26. Gagnidze, M. Iavich, G. Iashvili, Some Aspects of Post-Quantum Cryptosystems, Abstract book, EURO-ASIA FORUM IN POLITICS ECONOMICS AND BUSINESS – 2016, JULY 21-22, 2016, BELGRADE, SERBIA.
 27. Gagnidze, M. Iavich, G. Iashvili, Some Aspects of Post-Quantum Cryptosystems, Eurasian Journal of Business and Management, 4(4), 2016.
 28. Gagnidze A.G., Iavich M.P., Iashvili G.U. Lattice based post-quantum cryptosystems // Modern scientific researches and innovations. 2016. № 10 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2016/10/72575>
 29. Gagnidze, M. Iavich, G. Iashvili, Attacks on post-quantum cryptosystems, Taras Shevchenko National University of Kyiv, 17-th International Young Scientists Conference" Optics & High Technology Material Science – SPO 2016", October 27th – 30th , Abstract Book, 2016.
 30. Gagnidze A.G., Iavich M.P., Iashvili G.U. Multivariate public key crypto-systems // Modern scientific researches and innovations. 2016. № 11 [Electronic journal]. URL: <http://web.s nauka.ru/en/issues/2016/11/74225>
 31. Iavich M.P., Baranov M.V. Simulation of online tutorial's positive influence on educational process // Modern scientific researches and innovations. 2017. № 2 [Electronic journal]. URL: <http://web.s nauka.ru/issues/2017/02/78629>
 32. Gagnidze A.G., Iavich M.P., Iashvili G.U. Improved version of Merkle crypto system // Modern scientific researches and innovations. 2017. № 5 [Electronic journal]. URL: <http://web.s nauka.ru/issues/2017/05/81949>
 33. M.Iavich, G.Iashvili, HASH BASED CRYPTO-SYSTEMS USE IN POST-QUANTUM CRYPTOGRAPHY, II Scientific conference "Problems of cybersecurity information and telecommunication systems", Faculty of Information Technology Taras Shevchenko National University of Kyiv, 23-24 March, 2017, Abstract Book
 34. A.Gagnidze, M.Iavich, LATTICES USE IN POST-QUANTUM CRYPTOGRAPHY, II Scientific conference "Problems of cybersecurity information and telecommunication systems", Faculty of Information Technology Taras Shevchenko National University of Kyiv, 23-24 March, 2017, Abstract Book
 35. Gagnidze A.G., Iavich M.P., Iashvili G.U., Analysis of Post Quantum Cryptography use in Practice, Bulletin of the Georgian National Academy of Sciences, vol. 11, no. 2, 2017, p.29-36.
 36. Iavich M., Arakeliani. A. Implementation of Merkle and its analyses // Modern scientific researches and innovations. 2017. № 6 URL: <http://web.s nauka.ru/issues/2017/06/83971>
 37. Iavich. M. P., Iashvili. G. I., CAPTCHA analysis and its problems// Scientific & practical cyber security journal (SPCSJ) № 1. [Electronic journal]. URL: <http://journal.scsa.ge/issues/2017/09/415>
 38. Gagnidze. A. G., Iavich. M. P., Inasaridze. N. K., Iashvili. G. I., Analysis of one-time signature schemes// Scientific &

- practical cyber security journal (SPCSJ) № 1. [Electronic journal]. URL: <http://journal.scsa.ge/issues/2017/09/455>
39. A.Gagnidze, M.Iavich, G. Iashvili Merkle with quantum TRNG // Scientific & practical cyber security journal (SPCSJ) № 2. [Electronic journal]. URL: <http://journal.scsa.ge/issues/2017/12/772>
40. M.Iavich, G.Iashvili Design of multi-user systems based on human computer interaction // Scientific & practical cyber security journal (SPCSJ) № 2.[Electronic journal]. URL: <http://journal.scsa.ge/ru/issues/2017/12/812>
41. A. Gagnidze, M.Iavich, G.Iashvili, N. Inasaridze, V. Vyalkova CRITICAL ANALYSIS OF HASH BASED SIGNATURE SCHEMES // International Journal of Cyber-Security and Digital Forensics (IJCSDF), Vol 7. N1, 2017, p. 47-55.
42. Avtandil Gagnidze, Maksim Iavich, Giorgi Iashvili// Novel Version of Merkle Cryptosystem// BULLETIN OF THE GEORGIAN NATIONAL ACADEMY OF SCIENCES, vol. 11, no. 4, 2017, p. 28-33.
43. Iavich M. Vialkova V. // Critical Analysis of Signature Schemes // International Scientific Conference - State and Prospects of Reforming Sector of Security and Defense in Ukraine, Vol 1. 2017, p. 470-472.
44. S. Gnatyuk, V. Kinzeryavyy, M. Iavich, D. Prysiaznyi, K. Yubuzova; High-Performance Reliable Block Encryption Algorithms Securedagainst Linear and Differential Cryptanalytic Attacks; ICTERI 2018; <http://ceur-ws.org/Vol-2104/>; 2018.
45. R. Megrelishvili, M. Jinjikhadze, M. Iavich, A. Gagnidze, G. Iashvili, Post-quantum key-exchange protocols; IVUS 2018; <http://ceur-ws.org/Vol-2145/>; 2019.
46. A.Gagnidze, M.Iavich, G.Iashvili, Improvement of Hash Based Digital Signature; CEUR Workshop Proceedings (CEUR-WS.org), 2018.
47. N.Inassaridze, M,Iavich, E. Khmaladze, G. Iashvili, Naive Algorithm to Bos-Chaum One-Time Signature Scheme, Bulletin of the Georgian National Academy of Sciences, 2018.
48. Maksim Iavich, Sergiy Gnatyuk, Giorgi Iashvili, Andriy Fesenko, Cyber security European standards in business, Scientific and practical cyber security journal, 2019.
49. Maksim Iavich, Sergiy Gnatyuk, Giorgi Iashvili, Andriy Fesenko, Security methods against modern cyber-attack vectors in countries of Europe, Scientific and practical cyber security journal, 2019.
50. Maksim Iavich, Sergiy Gnatyuk, Giorgi Iashvili, AndriyFesenko, ENSURING EUROPEAN CIVIL AVIATION CYBERSECURITY, Scientific and practical cyber security journal, 2019.
51. Sergiy Gnatyuk, Maksim Iavich, Yuliia Polishchuk, Elza Jintcharadze and Andriy Fesenko, Comparison and hybridimplementation of Blowfish, Twofish and RSA cryptosystems; 2019 IEEE 2nd Ukraine Conference on Electrical and Computer Engineering (UKRCON); DOI: 10.1109/UKRCON.2019.8880005; 2019.
52. Zhengbing Hu, Sergiy Gnatyuk, Tetyana Okhrimenko(Zhmurko), Vasyl Kinzeryavyy, Maksim Iavich, Khalicha Yubuzova; High-Speed Privacy Amplification Method for Deterministic Quantum Cryptography Protocols Using Pairs of Entangled Qutrits; ICTERI 2019; <http://ceur-ws.org/Vol-2393/>; 2019.
53. R. Megrelishvili, M. Jinjikhadze, A. Gagnidze, M. Iavich and G. Iashvili; Generation of high order primitive matrix elements for post-quantum key exchange protocol; IVUS-2019; <http://ceur-ws.org/Vol-2470/>; pp. 48-51; 2019.
54. E. Jintcharadze, M. Iavich; Public-Key hybrid cryptosystem based on Blowfish and RSA; IVUS-2019; <http://ceur-ws.org/Vol-2470/>; pp. 52-55; 2019.
55. Iavich M., Gagnidze A., Iashvili G., Gnatyuk S., Vialkova V. Lattice based Merkle; IVUS-2019; <http://ceur-ws.org/Vol-2470/>; pp. 13-16; 2019.
56. Synthesis and Comparison of Hybrid Cryptographic Algorithms; M. Iavich, E. Jintcharadze; X International Conference of the Georgian Mathematical Union, 2019.
57. Intruder Control Mode Simulation of Deterministic Quantum Cryptography Protocol for Depolarized Quantum Channel; S. Gnatyuk, T. Okhrimenko, M. Iavich, R. Berdibayev; 2019 IEEE International Scientific-Practical Conference Problems of Info-communications, Science and Technology (PIC S&T); DOI: 10.1109/PICST47496.2019.9061293; 2019.
58. ADVANTAGES AND CHALLENGES OF QRNG INTEGRATION INTO MERKLE; M. Iavich, T. Kuchukhidze, A. Gagnidze, G. Iashvili; Scientific and practical cyber security journal, 2020.
59. Practices of Using Blockchain Technology in ICT under the Digitalization of the World Economy; N. Kraus, N. Andrusiak, A. Savchenko, M. Iavich; CMiGIN 2019; <http://ceur-ws.org/Vol-2588/>; 2020.
60. Increasing the Accuracy of the Information Load Annual Growth Evaluation on the Internet of Things; I. Zhukov, N. Pechurin, L. Kondratova, M. Iavich; CMiGIN 2019; <http://ceur-ws.org/Vol-2588/>; 2020.
61. High-Speed and Secure PRNG for Cryptographic Applications; T. Okhrimenko, S. Tynymbayev, M. Iavich; I. J. Computer Network and Information Security, 2020, 3; DOI: 10.5815/ijcnis.2020.03.01.
62. Improved Gentry's Fully Homomorphic Encryption Scheme: Design, Implementation and Performance Evaluation; S. Kazmirschuk, A. Ilyenko, S. Ilyenko, Y. Olesya, M. Herasymenko, M. Iavich; CybHyg 2019; <http://ceur-ws.org/Vol-2654/>; 2020.
63. Informational Technology for the Improvement of Flight Zone Security; O. Kozhokhina, O. Shcherbyna, O. Churzha, S. Yehorov, M. Iavich, N. Churkin; CybHyg 2019; <http://ceur-ws.org/Vol-2654/>; 2020.
64. Iavich M., Gnatyuk S., Arakelian A., Iashvili G., Polishchuk Y., Prysiaznyi D. (2021) Improved Post-quantum Merkle Algorithm Based on Threads. In: Hu Z., Petoukhov S., Dychka I., He M. (eds) Advances in Computer Science for Engineering and Education III. ICCSEEA 2020. Advances in Intelligent Systems and Computing, vol. 1247. Springer, Cham. https://doi.org/10.1007/978-3-030-55506-1_41.
65. Improvement of Merkle Signature Scheme by Means of Optical Quantum Random Number Generators; M. Iavich, A. Gagnidze, G. Iashvili, T. Okhrimenko, A. Arakelian, A. Fesenko; Advances in Computer Science for Engineering and Education III (pp.440-453), 2020; DOI: 10.1007/978-3-030-55506-1_40.

66. Combined System of Phase Synchronization with Increased Astatism order in Frequency Monitoring Mode; O. Turovsky, Y. Khlaponin, M. Hassan Mohamed, T. Okhrimenko, I. Goncharenko, M. Iavich; COAPSN 2020; <http://ceur-ws.org/Vol-2616/>; 2020.
67. Hybrid Implementation of Twofish, AES, ElGamal and RSA Cryptosystems; E. Jintcharadze, M. Iavich; 2020 IEEE East-West Design & Test Symposium (EWDTS), 1-5; DOI: 10.1109/EWDTS50664.2020.9224901; 2020.
68. Studies on Cryptographic Security and Speed Analysis of New Advanced Block Cipher; S. Gnatyuk, V. Kinzeryavyy, M. Iavich, R. Odarchenko, R. Berdibayev, Y. Burmak; ICST 2020; <http://ceur-ws.org/Vol-2711/>; 2020.
69. Increasing Usability of TLS Certificate Generation Process Using Secure Design; G. Iashvili, M. Iavich, A. Gagnidze, S. Gnatyuk; IVUS-2020; <http://ceur-ws.org/Vol-2698/>; 2020.
70. Post-Quantum Digital Signatures with Attenuated Pulse Generator; M. Iavich, R. Bociu, A. Arakelian, G. Iashvili; IVUS-2020; <http://ceur-ws.org/Vol-2698/>; 2020.
71. The analysis of the difference of 4G and 5G securities; M. Iavich, G. Iashvili, A. Gagnidze, L. Nachkebia, S. Khukhashvili; Scientific and practical cyber security journal, (SPCSJ) 4(3); 2020.
72. Analysis of the Essence of Social Networks as a Tool for Mediatization of the Historical and Cultural Heritage of Museums; Zhanna Myna, Vasyl Banakh, Andriy Nahirnyak, Maksim Iavich; COAPSN 2020; (pp.199-213); <http://ceur-ws.org/Vol-2616/>.
73. Improved Secure Stream Cipher for Cloud Computing; Sergiy Gnatyuk, Maksim Iavich, Vasyl Kinzeryavyy, Tetyana Okhrimenko, Yuliia Burmak, Iuliia Goncharenko; ICTERI 2020; (pp.183-197); <http://ceur-ws.org/Vol-2732/>
74. Post-quantum Digital Signature Scheme for Personal Data Security in Communication Network Systems; Iavich M., Iashvili G., Bociu R., Gnatyuk S. (2021); In: Hu Z., Petoukhov S., He M. (eds) Advances in Artificial Systems for Medicine and Education IV. AIMEE 2020. Advances in Intelligent Systems and Computing, vol 1315. Springer, Cham. https://doi.org/10.1007/978-3-030-67133-4_28.
75. Mathematical Model Building for COVID-19 Diseases Data in European Countries Maksym Zaliskyi, Roman Odarchenko, Yuliia Petrova, Maksim Iavich and Irakli Pirtskhala; IDDM 2020 The 3rd International Conference on Informatics & Data-Driven Medicine; <http://ceur-ws.org/Vol-2753/>.
76. Secure e-Health System for the Integrated Management of Personal Health Data Collected by IoT Devices; Razvan Bociu, Maksim Iavich, Sergiy Gnatyuk, Dinara Ospanova, Yuliia Sotnichenko; Cybersecurity Providing in Information and Telecommunication Systems 2021 (CPITS 2021); pp. 164-174; <http://ceur-ws.org/Vol-2923/paper18.pdf>, 2021.
77. Maksim Iavich, Tamari Kuchukhidze, Giorgi Iashvili, Sergiy Gnatyuk, Razvan Bociu," Novel Quantum Random Number Generator with the Improved Certification Method ", International Journal of Mathematical Sciences and Computing (IJMSC), Vol.7, No.3, pp. 41-53, 2021. DOI: 10.5815/ijmsc.2021.03.05
78. Novel Intrusion Detection System for 5G; Maksim Iavich, Avtandil Gagnidze, Giorgi Iashvili, Sergei Simonov, Razvan Bociu; IVUS 2021; pp. 27-34; <http://ceur-ws.org/Vol-2915/paper4.pdf>, 2021.
79. Post-Quantum Digital Signature Scheme with BB84 Protocol; Giorgi Labadze, Maksim Iavich, Giorgi Iashvili, Avtandil Gagnidze, Sergiy Gnatyuk; IVUS 2021; pp. 35-44; <http://ceur-ws.org/Vol-2915/paper5.pdf>, 2021.
80. Modeling of Critical Nodes in Complex Poorly Structured Organizational Systems; Tatiana Babenko, Hryhorii Hnatienko, Vira Ignisca, Maksim Iavich; IVUS 2021; pp. 92-101; <http://ceur-ws.org/Vol-2915/paper11.pdf>, 2021.
81. Iavich M., Iashvili G., Gnatyuk S., Tolbatov A., Mirtskhulava L. (2021) Efficient and Secure Digital Signature Scheme for Post Quantum Epoch. In: Lopata A., Gudonienė D., Butkienė R. (eds) Information and Software Technologies. ICIST 2021. Communications in Computer and Information Science, vol 1486. Springer, Cham. https://doi.org/10.1007/978-3-030-88304-1_15
82. Gnatyuk S., Berdibayev R., Smirnova T., Avkurova Z., Iavich M. (2021) Cloud-Based Cyber Incidents Response System and Software Tools. In: Lopata A., Gudonienė D., Butkienė R. (eds) Information and Software Technologies. ICIST 2021. Communications in Computer and Information Science, vol 1486. Springer, Cham. https://doi.org/10.1007/978-3-030-88304-1_14
83. Iavich M., Akhalaia G., Gnatyuk S. (2022) Method of Improving the Security of 5G Network Architecture Concept for Energy and Other Sectors of the Critical Infrastructure. In: Zaporozhets A. (eds) Systems, Decision and Control in Energy III. Studies in Systems, Decision and Control, vol 399. Springer, Cham. https://doi.org/10.1007/978-3-030-87675-3_14
84. Bociu, R.; Bociu, D.; Iavich, M. Objects Detection Using Sensors Data Fusion in Autonomous Driving Scenarios. Electronics 2021, 10, 2903. <https://doi.org/10.3390/electronics10232903>
85. Secure e-Health System for the Integrated Management of Personal Health Data Collected by IoT Devices; Razvan Bociu, Maksim Iavich, Sergiy Gnatyuk, Dinara Ospanova, Yuliia Sotnichenko; Cybersecurity Providing in Information and Telecommunication Systems 2021 (CPITS 2021); pp. 164-174; <http://ceur-ws.org/Vol-2923/paper18.pdf>, 2021.
86. Maksim Iavich, Tamari Kuchukhidze, Giorgi Iashvili, Sergiy Gnatyuk, Razvan Bociu," Novel Quantum Random Number Generator with the Improved Certification Method ", International Journal of Mathematical Sciences and Computing(IJMSC), Vol.7, No.3, pp. 41-53, 2021. DOI: 10.5815/ijmsc.2021.03.05
87. Novel Architecture of 5G Network; Giorgi Akhalaia, Maksim Iavich; IVUS 2021; pp. 11-17; <http://ceur-ws.org/Vol-2915/paper2.pdf>, 2021.
88. Modeling of Critical Nodes in Complex Poorly Structured Organizational Systems; Tatiana Babenko, Hryhorii Hnatienko, Vira Ignisca, Maksim Iavich; IVUS 2021; pp. 92-101; <http://ceur-ws.org/Vol-2915/paper11.pdf>, 2021.
89. Iavich M., Iashvili G., Gnatyuk S., Tolbatov A., Mirtskhulava L. (2021) Efficient and Secure Digital Signature Scheme for Post Quantum Epoch. In: Lopata A., Gudonienė D., Butkienė R. (eds) Information and Software Technologies. ICIST 2021. Communications in Computer and Information Science, vol 1486. Springer, Cham. https://doi.org/10.1007/978-3-030-88304-1_15

90. Gnatyuk S., Berdibayev R., Smirnova T., Avkurova Z., Iavich M. (2021) Cloud-Based Cyber Incidents Response System and Software Tools. In: Lopata A., Gudonienė D., Butkienė R. (eds) Information and Software Technologies. ICIST 2021. Communications in Computer and Information Science, vol 1486. Springer, Cham. https://doi.org/10.1007/978-3-030-88304-1_14
91. Iavich M., Akhalaia G., Gnatyuk S. (2022) Method of Improving the Security of 5G Network Architecture Concept for Energy and Other Sectors of the Critical Infrastructure. In: Zaporozhets A. (eds) Systems, Decision and Control in Energy III. Studies in Systems, Decision and Control, vol 399. Springer, Cham. https://doi.org/10.1007/978-3-030-87675-3_14
92. Bocu, R.; Bocu, D.; Iavich, M. Objects Detection Using Sensors Data Fusion in Autonomous Driving Scenarios. *Electronics* 2021, 10, 2903. <https://doi.org/10.3390/electronics10232903>
93. Maksim Iavich, Tamari Kuchukhidze, Giorgi Iashvili, Sergiy Gnatyuk Hybrid quantum random number generator for cryptographic algorithms. *RADIOELECTRONIC AND COMPUTER SYSTEMS*, 4, 2021. DOI: <https://doi.org/10.32620/reks.2021.4.09>
94. G. Iashvili, M. Iavich, S. Gnatyuk, R. Odarchenko and S. Simonov, "Simulated Test Laboratory for 5G Test Patterns," 2021 11th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), 2021, pp. 521-526, doi: 10.1109/IDAACS53288.2021.9660842.
95. G. Iashvili, M. Iavich, R. Bocu, R. Odarchenko and S. Gnatyuk, "Intrusion Detection System for 5G with a Focus on DOS/DDOS Attacks," 2021 11th IEEE International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), 2021, pp. 861-864, doi: 10.1109/IDAACS53288.2021.9661021.
96. M. Iavich, R. Bocu, G. Iashvili and R. Odarchenko, "A Post-Quantum Secure e-Health System for the Data Management," 2021 IEEE 4th International Conference on Advanced Information and Communication Technologies (AICT), 2021, pp. 270-276, doi: 10.1109/AICT52120.2021.9628896.
97. M. Iavich, G. Iashvili, A. Gagnidze and R. Odarchenko, "Use of Content-Filtering Method for Hardware Vulnerabilities Identification System," 2021 IEEE 4th International Conference on Advanced Information and Communication Technologies (AICT), 2021, pp. 132-136, doi: 10.1109/AICT52120.2021.9628948.
98. Bocu, R., Iavich, M. (2022). Enhanced Autonomous Driving Through Improved 3D Objects Detection. In: Barolli, L., Hussain, F., Enokido, T. (eds) Advanced Information Networking and Applications. AINA 2022. Lecture Notes in Networks and Systems, vol 449. Springer, Cham. https://doi.org/10.1007/978-3-030-99584-3_6
99. Iavich, M., Bocu, R., Gagnidze, A. (2022). Real Time Self-developing Cybersecurity Function for 5G. In: Barolli, L., Hussain, F., Enokido, T. (eds) Advanced Information Networking and Applications. AINA 2022. Lecture Notes in Networks and Systems, vol 451. Springer, Cham. https://doi.org/10.1007/978-3-030-99619-2_36
100. Gagnidze A., Iavich M. Demand-side Factors of the Georgian Cars' Leasing Market; American International Journal of Business Management (AIJBM) ISSN- 2379-106X, www.aijbm.com Volume 5, Issue 04 (April-2022), PP 43-48. <https://www.aijbm.com/wp-content/uploads/2022/04/F544348.pdf>
101. Bocu, R.; Iavich, M. Real-Time Intrusion Detection and Prevention System for 5G and beyond Software-Defined Networks. *Symmetry* 2023, 15, 110. <https://doi.org/10.3390/sym15010110>
102. Bocu, R.; Bocu, D.; Iavich, M. An Extended Review Concerning the Relevance of Deep Learning and Privacy Techniques for Data-Driven Soft Sensors. *Sensors* 2023, 23, 294. <https://doi.org/10.3390/s23010294>
103. Yury Palekha, Natalia Zozulia, Natalia Moskovchenko, Volodymyr Sadovenko, Natalia Vovk, Maksim Iavich; Technological Processes of Working with Documented Information in the Organization as an Indicator of Corporate Information Subculture; pp. 229-240; <https://ceur-ws.org/Vol-3296/>
104. Maksim Iavich, George Iashvili, Zhadyra Avkurova, Serhii Dorozhynskyi, Andriy Fesenko. Machine Learning Algorithms for 5G Networks Security and the Corresponding Testing Environment; Cybersecurity Providing in Information and Telecommunication Systems II 2021 (CPITS-II-1 2021); pp. 139-149; <http://ceur-ws.org/Vol-3187/>
105. Maksim Iavich, Dinara Ospanova, Keti Grdzelidze, Rashit Brzhanov, Yuliia Polishchuk. Advanced Data Security and Privacy Ensuring Methods in 5G Era; Cybersecurity Providing in Information and Telecommunication Systems II 2021 (CPITS-II-1 2021); pp. 160-169; <http://ceur-ws.org/Vol-3187/>
106. Maksim Iavich; Avtandil Gagnidze; Giorgi Iashvili; THE INITIAL CONCEPTS OF POST-QUANTUM SIGNATURE DESIGN USING VERKLE TREE; Scientific and practical cyber security journal | ISSN 2587-4667; pp.50-56; <https://journal.scsa.ge/papers/the-initial-concepts-of-post-quantum-signature-design-using-verkle-tree/>
107. Iavich, M., Kuchukhidze, T. (2023). The Novel Multi Source Method for the Randomness Extraction. In: Hu, Z., Wang, Y., He, M. (eds) Advances in Intelligent Systems, Computer Science and Digital Economics IV. CSDEIS 2022. Lecture Notes on Data Engineering and Communications Technologies, vol 158. Springer, Cham. https://doi.org/10.1007/978-3-031-24475-9_6
108. Iavich, M. (2023). Post-quantum Scheme with the Novel Random Number Generator with the Corresponding Certification Method. In: Hu, Z., Wang, Y., He, M. (eds) Advances in Intelligent Systems, Computer Science and Digital Economics IV. CSDEIS 2022. Lecture Notes on Data Engineering and Communications Technologies, vol 158. Springer, Cham. https://doi.org/10.1007/978-3-031-24475-9_7
109. Iavich, M., Sharvadze, L. (2023). The Model of the Novel One Windows Secure Clinic Management Systems. In: Hu, Z., Wang, Y., He, M. (eds) Advances in Intelligent Systems, Computer Science and Digital Economics IV. CSDEIS 2022. Lecture Notes on Data Engineering and Communications Technologies, vol 158. Springer, Cham. https://doi.org/10.1007/978-3-031-24475-9_29
110. Iavich, M., Akhalaia, G., Bocu, R. (2023). Device Tracking Threats in 5G Network. In: Barolli, L. (eds) Advanced Information Networking and Applications. AINA 2023. Lecture Notes in Networks and Systems, vol 655. Springer, Cham.

https://doi.org/10.1007/978-3-031-28694-0_46

111. Iavich, M., Kuchukhidze, T., Bociu, R. (2023). A Post-quantum Cryptosystem with a Hybrid Quantum Random Number Generator. In: Barolli, L. (eds) Advanced Information Networking and Applications. AINA 2023. Lecture Notes in Networks and Systems, vol 654. Springer, Cham. https://doi.org/10.1007/978-3-031-28451-9_32
112. Iavich, M., Gnatyuk, S., Iashvili, G., Odarchenko, R., Simonov, S. (2023). 5G Security Function and Its Testing Environment. In: Faure, E., Danchenko, O., Bondarenko, M., Tryus, Y., Bazilo, C., Zaspa, G. (eds) Information Technology for Education, Science, and Technics. ITEST 2022. Lecture Notes on Data Engineering and Communications Technologies, vol 178. Springer, Cham. https://doi.org/10.1007/978-3-031-35467-0_39
113. Iavich, M., Iashvili, G., Odarchenko, R., Gnatyuk, S., Gagnidze, A. (2023). Developing Security Recommender System Using Content-Based Filtering Mechanisms. In: Faure, E., Danchenko, O., Bondarenko, M., Tryus, Y., Bazilo, C., Zaspa, G. (eds) Information Technology for Education, Science, and Technics. ITEST 2022. Lecture Notes on Data Engineering and Communications Technologies, vol 178. Springer, Cham. https://doi.org/10.1007/978-3-031-35467-0_37
114. Gorlov, L.; Iavich, M.; Bociu, R. Linear Layer Architecture Based on Cyclic Shift and XOR. *Symmetry* 2023, 15, 1496. <https://doi.org/10.3390/sym15081496>
115. Tvalavadze, T., Gigashvili, K., Mania, E., Iavich, M. (2023). Automated Dating of Galaktion Tabidze's Handwritten Texts. In: Hu, Z., Dychka, I., He, M. (eds) Advances in Computer Science for Engineering and Education VI. ICCSEEA 2023. Lecture Notes on Data Engineering and Communications Technologies, vol 181. Springer, Cham. https://doi.org/10.1007/978-3-031-36118-0_23
116. Iavich, M. (2023). Machine Learning Based Function for 5G Working with CPU Threads. In: Hu, Z., Dychka, I., He, M. (eds) Advances in Computer Science for Engineering and Education VI. ICCSEEA 2023. Lecture Notes on Data Engineering and Communications Technologies, vol 181. Springer, Cham. https://doi.org/10.1007/978-3-031-36118-0_52
117. A. Ziro, S. Toibayeva, S. Gnatyuk, A. Imanbayev, M. Iavich and Z. Zhaybergenova, "Research of the Information Security Audit System in Organizations," 2023 IEEE International Conference on Smart Information Systems and Technologies (SIST), Astana, Kazakhstan, 2023, pp. 440-444, doi: 10.1109/SIST58284.2023.10223557.
118. Correlation of Bitcoin Price and S&P 500 Company Index Avtandil Gagnidze, Maksim Iavich, Giorgi Iashvili, Dali Magraqvelidze, and Tetiana Okhrimenko, Vol-3504, Proceedings of the Workshop on Classic, Quantum, and Post-Quantum Cryptography (CQPC 2023) co-located with International Conference on Problems of Infocommunications. Science and Technology (PICST 2023), 2023. <https://ceur-ws.org/Vol-3504/>
119. Odarchenko, R.; Iavich, M.; Iashvili, G.; Fedushko, S.; Syerov, Y. Assessment of Security KPIs for 5G Network Slices for Special Groups of Subscribers. *Big Data Cogn. Comput.* 2023, 7, 169. <https://doi.org/10.3390/bdcc7040169>
120. Global processes of economy's sustainable development, information society, systems and technologies Nata Bibiluri, Gia Surguladze, Giorgi Tsaava, Makhaz Bibiluri and Maksim Iavich; Conflict Management in Global Information Networks - CMiGiN 2022. CEUR, Vol-3530, pp. 224-234. <https://ceur-ws.org/Vol-3530/>
121. Secure Encrypted Connection on Georgian Website Giorgi Akhalaia, Maksim Iavich, Giorgi Iashvili, Dmytro Prysiazny, Tetiana Smirnova; Cybersecurity Providing in Information and Telecommunication Systems II 2023. CEUR, Vol-3550, pp. 313-320. <https://ceur-ws.org/Vol-3550/>
122. Verkle Tree-based Post-Quantum Digital Signature Scheme using Stateless Updatable Vector Commitment Maksim Iavich, Tamari Kuchukhidze, Tetiana Okhrimenko; Cybersecurity Providing in Information and Telecommunication Systems II 2023. CEUR, Vol-3550, pp. 157-166. <https://ceur-ws.org/Vol-3550/>
123. Digital Signature Design Using Verkle Tree Maksim Iavich, Tamari Kuchukhidze; Proceedings of the 28th International Conference on Information Society and University Studies (IVUS 2023). CEUR, Vol-3575, pp. 83-91. <https://ceur-ws.org/Vol-3575/>
124. Enhancing Cyber Intelligence Capabilities through Process Automation: Advantages and Opportunities Giorgi Iashvili, Maksim Iavich; Proceedings of the 28th International Conference on Information Society and University Studies (IVUS 2023). CEUR, Vol-3575, pp. 92-101. <https://ceur-ws.org/Vol-3575/>
125. High-Band Related Threats in 5G Network Giorgi Akhalaia, Maksim Iavich; Proceedings of the 28th International Conference on Information Society and University Studies (IVUS 2023). CEUR, Vol-3575, pp. 132-140. <https://ceur-ws.org/Vol-3575/>
126. Utilizing the «MouseJack» Vulnerability in Physical Assessments Maksim Iavich, Sergei Simonov; Proceedings of the 28th International Conference on Information Society and University Studies (IVUS 2023). CEUR, Vol-3575, pp. 364-371. <https://ceur-ws.org/Vol-3575/>
127. Iavich, M.; Kuchukhidze, T.; Bociu, R. A Post-Quantum Digital Signature Using Verkle Trees and Lattices. *Symmetry* 2023, 15, 2165. <https://doi.org/10.3390/sym15122165>
128. D. Proskurin, S. Gnatyuk, T. Okhrimenko and M. Iavich, "ML-Based Cryptographic Keys Quality Assessment for 5G / 6G Networks Privacy and Security," 2023 IEEE 12th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), Dortmund, Germany, 2023, pp. 1025-1030, doi: 10.1109/IDAACS58523.2023.10348795.
129. Maksim Iavich, Lasha Sharvadze, The Efficient and Secure Digital Management System for Radiologists, pp.475 – 484 DOI10.3233/ATDE231359 Category Research Article Series Advances in Transdisciplinary Engineering Ebook Volume 48: Artificial Intelligence, Medical Engineering and Education
130. Vladimer Svanadze, Maksim Iavich, Impact of Internet Fragmentation on the Unity, Security, and Stability of Global

- Internet; CPITS 2024 Cybersecurity Providing in Information and Telecommunication Systems 2024; CEUR, Vol-3654, pp. 520–525. <https://ceur-ws.org/Vol-3654/>
131. Vladimer Svanadze, Maksim Iavich, and Sergiy Gnatyuk, Challenges and Solutions for Cybersecurity and Information Security Management in Organizations; CPITS 2024 Cybersecurity Providing in Information and Telecommunication Systems 2024; Vol-3654, pp. 497–504. <https://ceur-ws.org/Vol-3654/>
 132. Iavich, M.; Kuchukhidze, T. Investigating CRYSTALS-Kyber Vulnerabilities: Attack Analysis and Mitigation. *Cryptography* 2024, 8, 15. <https://doi.org/10.3390/cryptography8020015>
 133. Iavich, M., Odarchenko, R. (2024). Automated Penetration Testing in 5G Networks. In: Nechyporuk, M., Pavlikov, V., Krytskyi, D. (eds) Integrated Computer Technologies in Mechanical Engineering - 2023. ICTM 2023. Lecture Notes in Networks and Systems, vol 996. Springer, Cham. https://doi.org/10.1007/978-3-031-60549-9_33
 134. Razvan Bocu, Maksim Iavich, Enhanced detection of low-rate DDoS attack patterns using machine learning models, *Journal of Network and Computer Applications*, Volume 227, 2024, 103903, ISSN 1084-8045, <https://doi.org/10.1016/j.jnca.2024.103903>. (<https://www.sciencedirect.com/science/article/pii/S1084804524000808>)
 135. Amirkhanova, D.S.; Iavich, M.; Mamyrbayev, O. Lattice-Based Post-Quantum Public Key Encryption Scheme Using ElGamal's Principles. *Cryptography* 2024, 8, 31. <https://doi.org/10.3390/cryptography8030031>
 136. POST-QUANTUM DIGITAL SIGNATURE USING VERKLE TREES AND LATTICES, Maksim Iavich, Tamari Kuchukhidze, Avtandil Gagnidze, Scientific and practical cyber security journal | ISSN 2587-4667, September 2024, pp.35-52
 137. Maksim Iavich, Sergei Simonovi, Tetiana Okhrimenko, Cryptography as a dual-faceted instrument of security and vulnerability (short paper); Cybersecurity Providing in Information and Telecommunication Systems II 2024; CEUR, Vol-3826, pp. 378–384; <https://ceur-ws.org/Vol-3826>
 138. Maksim Iavich, Sergiy Gnatyuk, Assel Mukasheva, Decoding the CRYSTALS-Kyber attack using artificial intelligence: Examination and strategies for resilience (short paper); Cybersecurity Providing in Information and Telecommunication Systems II 2024; CEUR, Vol-3826, pp. 342–349; <https://ceur-ws.org/Vol-3826>
 139. Dmytro Proskurin, Maksim Iavich, Tetiana Okhrimenko, Okoro Chukwukaelonma, Tetiana Hryniuk, Predicting pseudo-random number generator output with sequential analysis; *Cyber Security and Data Protection* 2024; CEUR, Vol-3800, pp.42-57, Link: <https://ceur-ws.org/Vol-3800>
 140. Tea Tvalavadze, Ia Ghadua, Giorgi Kalandadze, Maksim Iavich, Signature-based manual dating vs. neural network automation (short paper); *Cyber Security and Data Protection* 2024; CEUR, Vol-3800, pp.123-130, Link: <https://ceur-ws.org/Vol-3800>
 141. Maksim Iavich, Oksana Kovalchuk, Sergiy Gnatyuk, Yuliia Khavikova, and Volodymyr Sokolov, Classical and post-quantum encryption for GDPR; *Classic, Quantum, and Post-Quantum Cryptography* 2024; CEUR, Vol-3829, pp. 70-78; link: <https://ceur-ws.org/Vol-3829/>
 142. Maksim Iavich, The evolution of digital signatures: From classical to post-quantum; *Classic, Quantum, and Post-Quantum Cryptography* 2024; CEUR, Vol-3829, pp. 32-38; link: <https://ceur-ws.org/Vol-3829/>
 143. Anna Shilinh and Maksim Iavich, Modeling the processes of a mentorship assistance information system based on linguistic features of requests; *Social Communication and Information Activity in Digital Humanities* 2024; CEUR, Vol-3851; link: <https://ceur-ws.org/Vol-3851/>
 144. Maksim Iavich, Sergei Simonov and Sergiy Gnatyuk, Building C2 servers for the assessment of AI based antivirus; *Social Communication and Information Activity in Digital Humanities* 2024; CEUR, Vol-3851; Link: <https://ceur-ws.org/Vol-3851/>
 145. Maksim Iavich Zura Kevanishvili, Detecting Fair Play Violations in Chess Using Neural Networks; *Information Society and University Studies* 2024 (IVUS 2024); CEUR, Vol-3885, pp.121-127; link: <https://ceur-ws.org/Vol-3885/>
 146. Maksim Iavich, Maia Ninidze, Advancements in Dating Undated Manuscripts through Dual Methodologies; *Information Society and University Studies* 2024 (IVUS 2024); CEUR, Vol-3885, pp.79-88; link: <https://ceur-ws.org/Vol-3885/>
 147. Maksim Iavich, Giorgi Akhalaia, Roman Odarchenko, Ana Imnadze, Fortifying the digital fortress: A multi-layered defense strategy with SIEM, mail gateway, and sandbox technologies; *Algorithms of Data Processing* 2024; CEUR, Vol-3895, pp.216-226; link: <https://ceur-ws.org/Vol-3895/>
 148. Maksim Iavich, Sergiy Gnatyuk, Tamari Kuchukhidze, and Giorgi Iashvili; Balancing security and efficiency in deterministic random bit generators for post-quantum cryptography; *CH&CMiGIN 2024 - Cyber Hygiene & Conflict Management in Global Information Networks* 2024; CEUR, Vol-3925, pp. 265–272; Link: <https://ceur-ws.org/Vol-3925/>
 149. Ihor Zakutynskyi, Oleksandr Kalishuk, Maksim Iavich, Vitalii Nebylytsia and Vasyl Yehunko; AI-based user identification method for web services; *CH&CMiGIN 2024 - Cyber Hygiene & Conflict Management in Global Information Networks* 2024; CEUR, Vol-3925, pp. 143-154; Link: <https://ceur-ws.org/Vol-3925/>
 150. Iavich, M., Kevanishvili, Z. (2025). A Neural Network Approach to Chess Cheat Detection. In: Lopata, A., Gudonienė, D., Butkienė, R., Čeponis, J. (eds) *Information and Software Technologies. ICIST 2024. Communications in Computer and Information Science*, vol 2401. Springer, Cham. https://doi.org/10.1007/978-3-031-84263-4_12
 151. Iavich, M., Ninidze, M. (2025). Dating the Undated Manuscripts Manually and Automatically. In: Lopata, A., Gudonienė, D., Butkienė, R., Čeponis, J. (eds) *Information and Software Technologies. ICIST 2024. Communications in Computer and Information Science*, vol 2401. Springer, Cham. https://doi.org/10.1007/978-3-031-84263-4_17
 152. Iavich, M.; Kapalova, N. Asymmetric Post-Quantum Digital Signature Scheme with k-ary Verkle Trees. *Symmetry* 2025, 17, 437. <https://doi.org/10.3390/sym17030437>
 153. Iavich, M.; Kapalova, N. Optimizing Post-Quantum Digital Signatures with Verkle Trees and Quantum Seed-Based

- Pseudo-Random Generators. Computers 2025, 14, 103. <https://doi.org/10.3390/computers14030103>
154. Odarchenko, R., Iavich, M., & Pinchuk, A. (2025). Development of a method for automated 5G and beyond network slices penetration testing. Radioelectronic and Computer Systems, 2025(1), 248-263. doi:<https://doi.org/10.32620/reks.2025.1.17>
155. A. Gagnidze, M. Iavich, G. Iashvili, T. Kuchukhidze (2025) POST-QUANTUM PSEUDO RANDOM NUMBER GENERATORS. Scientific and practical cyber security journal 2025, vol. 9(1), 43-46. <https://journal.scsa.ge/papers/post-quantum-pseudo-random-number-generators/>
156. Yavich, M., Sabina, K., & Nurzhas, K. (2025). A comprehensive approach to cyber threats: Analysis of suspicious profiles and protection of web applications. International Journal of Research Publication and Reviews, 6(5), 13083-13088. <https://ijrpr.com/uploads/V6ISSUE5/IJRPR46498.pdf>
157. Iavich, M.; Kuchukhidze, T.; Bocu, R. Post-Quantum Digital Signature: Verkle-Based HORST. J. Cybersecur. Priv. 2025, 5, 28. <https://doi.org/10.3390/jcp5020028>
158. Maksim Iavich, Roman Odarchenko. A Novel Hybrid Method for Randomness Extraction; Advancements in Cybersecurity, CRC Press, 2025
159. Iavich, Maksim, Sergiy Gnatyuk, Sergei Simonov, and Viktoriia Sydorenko. "Taking LOLBAS Hacking to Another Level Stealing Passwords Using Built-in Binaries." CEUR Workshop Proceedings, vol. 3991, 2025, <https://ceur-ws.org/Vol-3991/short2.pdf>.
160. Svanadze, Vladimer, Maksim Iavich, and Viktor Lukashenko. "Geopolitical and Technical Dimensions of Internet Fragmentation." CEUR Workshop Proceedings, vol. 3991, 2025, <https://ceur-ws.org/Vol-3991/short3.pdf>.
161. Maksim Iavich, Tamari Kuchukhidze, Razvan Bocu, "A Novel Verkle Tree-based Post-quantum Digital Signature System with Enhanced Random Number Generation", International Journal of Computer Network and Information Security(IJCNIS), Vol.17, No.4, pp.19-36, 2025. DOI:10.5815/ijcnis.2025.04.02

7. გამოგონებები (საავტორო მოწმობები, პატენტები)

წლები	დასახელება

8. საერთაშორისო სამეცნიერო ორგანიზაციების წევრობა

წლები	დასახელება
2023-დღემდე	მერილენდის კიბერუსაფრთხოების ასოციაცია

9. ჯილდოები და პრემიები

თარიღი	ჯილდოს, პრემიის დასახელება
2024	ოქროს ჯილდო ნომინაციაში "წლის საუკეთესო მეცნიერი", კავკასიის უნივერსიტეტი (თბილისი, საქართველო)
2021	საუკეთესო სამეცნიერო ხელმძღვანელი "International Competition of Students Research Works in Cybersecurity"-ში, უკრაინის განათლების სამინისტრო (კიევი, უკრაინა)
2021	საუკეთელო ნაშრომის ჯილდო at "4th IEEE International Conference on Advance Information and Communication Technologies (AICT)"
2020	DeepSecScholar 2020, DeepSec კონფერენცია (ვენა, ავსტრია)
2019	საუკეთელო ნაშრომის ჯილდო, IVUS 2019 (კაუნასი, ლიეტუვა)
2018	2018 წლის ჯილდო ტექნოლოგიებისა და საინჟინრო მეცნიერებების მიმართულებით მოღვაწე წლის საუკეთესო ახალგაზრდა მეცნიერი (შოთა რუსთაველის საქართველოს ეროვნული სამეცნიერო ფონდი)
2018	საუკეთელო ნაშრომის ჯილდო, IVUS 2018 (კაუნასი, ლიეტუვა)

10. საპატიო წოდება

თარიღი	საპატიო წოდების დასახელება
2024	საპატიო დოქტორი (Doctor Honoris Causa), ეროვნული საავიაციო უნივერსიტეტი (უკრაინა)
2024	Weiser Professional Development Fellows-ის სტიპენდიანტი, მიჩიგანის უნივერსიტეტი (აშშ)