CONTENTS

1 Bybyk R. T., Nakonechnyi Yu. M.

Application of pseudorandom number generators in machine learning

13 Vakhula O. P., Vorobets P. A.

Security as Code using Agentic AI: efficiency in ensuring software development lifecycle security

26 Voloshyn M. I., Oleksiv M. V.

The impact of Bluetooth Low Energy interference and MU-MIMO technology on Wi-Fi 5 network performance

36 Hodovana M. V.

User authentication using the AES-GSM algorithm and PBKDF2 function

43 Hrytsko T. L., Hlukhov V. S.

Methods for parallelizing the compression of video streams from earth surface scanners

50 Deineka O. R., Harasymchuk O. I.

Itil as a component for methodology collecting, processing, storing, and classifying data in accordance with SOC2 Type2 requirements

60 Zhuravchak Yu. Yu., Zhuravchak D. Yu., Zhuravchak A. Yu.

Comparison of vulnerability scanners for detecting obfuscated malware in containers

71 Ivkova V. S., Opirskyi I. R.

Research into the possibility of integrating the compartmentalization method into the protection of information in open sources

84 Klushyn Yu. S.

Combined control of unmanned aerial vehicles under electronic warfare conditions

100 Kotliarov O. Yu., Bortnik L. L.

Methods for assessing the security of virtual networks and information security maturity models

114 Kudriavtsev D. O., Mychuda L. Z.

Overview of microservice architecture and analysis of typical vulnerabilities

122 Maksymiv M. R., Rak T. Y.

Hardware optimization of video quality improvement methods based on deep neural networks

134 Petriv P. P., Nakonechnyi T. I.

Innovative methods of encryption and storage of database parts in distributed systems based on smart contracts

154 Prokopovych-Tkachenko D. I., Khrushkov B. S., Bilan M. V., Cherkasky O. V.

siian m. v., Cherkasky U. v.

Intellectual re-engineering technologies in digital transformation of public services

167 Pukach A. I., Teslyuk V. M.

Archimedes spiral-based model for multifactor positioning of complex software support object

177 Sapsai O. S., Martseniuk Y. V., Partyka A. I.

Automate cloud security incident management with a SOAR-based approach

193 Syrotynskyi R. M., Tyshyk I. Y.

Optimizing firewall policy management in microsegmented networks

206 Sovyn Y. R., Sokolovskyi M. M., Lukovskyy T. I.

Efficient construction of bitsliced DES S-Boxes with reduced logical complexity

217 Khoma O. V., Yurchak I. Yu., Khich A. O.

Anomalies detection and traffic monitoring system in computer networks

235 Chuiko G. P.

Symbolic modeling of the quantum Grover search algorithm on two qubits: Quirk + Maple

242 Shyryi B. I., Lashko O. L.

Research and development of software behavioral components in computer gaming systems