## TECHNOLOGY AUDIT AND PRODUCTION RESERVES

No. 2/2(82), 2025

## CONTENTS



## **INFORMATION TECHNOLOGIES**

- 6 Research on mobile machine learning platforms for human gesture recognition in human-machine interaction systems Olesia Barkovska, Igor Ruban, Daria Tymoshenko, Oleksandr Holovchenko, Oleksandr Yankovskyi
- 15 Development of a standardized approach for evaluating business insights in stream processing systems based on technical metrics
  - Artem Bashtovyi, Andrii Fechan
- 21 Development of a neural network model for an automated HVAC system based on collected data Illia Velychko, Viktor Sidletskyi
- 27 Development of a model for coloring raster elements of polynomial transformation of digital images Bohdan Kavyn
- 32 Development of a model of power-linear conversion of digital images for dark tones Sviatoslav Kavyn



## SYSTEMS AND CONTROL PROCESSES

- 37 Risk analysis and cybersecurity enhancement of Digital Twins in dairy production Tetiana Savchenko, Nataliia Lutska, Lidiia Vlasenko, Mariana Sashnova, Andrii Zahorulko, Sofiia Minenko, Eldar Ibaiev, Nataliia Tytarenko
- Optimization of ammunition preparation strategies for modern artillery operations in computer simulation Oleksandr Toshev, Kateryna Kirkopulo, Oleksandr Klymchuk, Maksym Maksymov
- 58 Development of a decision support methodology for optimizing ROI in project management Alish Nazarov
- Development of a concept for the task of life cycle effective management of an operated information system Viktor Levykin, Maksym Ievlanov, Ihor Levykin, Oleksandr Petrichenko
- 74 Formation of a strategy for countering and identifying AI technologies in the fight against disinformation under martial law
  - Oleksandr Cherep, Yuliia Kaliuzhna, Lubomir Mykhailichenko, Svitlana Markova, Yevhen Naumenko
- **80** Abstracts and References
- 91 Анотації