

CONTENT

CHAPTER 1. INTELLIGENT SYSTEMS AND ARTIFICIAL INTELLIGENCE APPLICATIONS.....	3
Natalia Chernova. ML and AI models application in portfolio management ..	4
Oleh Hutsa, Dmytro Dvukhhlavov. Logico-analytical expertise of texts with a description of procedures based on intelligent technologies	31
Volodymyr Burdaiev. Development of a dialogue interface of an intelligent system for the Telegram platform.....	81
Rositsa Shvorak. Design of a context-aware AI System with modular decision-making using Large Language Models	111
Nataliia Khatsko, Kyrylo Khatsko. Research on anomaly detection methods in IoT data	136
CHAPTER 2. MATHEMATICAL MODELING AND COMPUTATIONAL METHODS.....	189
Denis Arkatov. Mathematical model of an automated system for dispatching railway traffic under time constraints based on multi-agent technologies	190
Oksana Ivashchenko, Olha Yanholenko, Svitlana Yershova. Mathematical models, methods, and algorithms for processing textual e-commerce product descriptions.....	216
Lev Raskin, Vitalii Vlasenko, Serhii Andriienko. Models and methods for assessing the technical condition of regenerative systems	292
CHAPTER 3. DATA MINING AND DATA ANALYSIS.....	373
Andrii Kopp, Dmytro Orlovskiy. Intelligent web applications code and database queries analysis using machine learning	374
Pavlo Zherzherunov. Dockerised blockchain architecture overview	437

Ihor Gamayun, Vladyslav Shevchenko. Advances in energy forecasting: a comparative review of machine learning and statistical techniques	461
Iryna Liutenko, Yaroslav Kravets. Development of a system for data mining from weather sites for the purpose of further analysis.....	484
CHAPTER 4. INFORMATION TECHNOLOGY IN EDUCATION	536
Karina Melnyk. Evaluating distance learning platforms: a multi-criteria approach	537
Mariia Bilova, Pavlo Sapronov. Competency-Based Architecture for Aligning Computer Science Education with Industry Demands	562
Oleksandr Shmatko, Oleg Kyrychenko. Securing student data: a comprehensive review of tokenization techniques and privacy-preserving technologies.....	611
Volodymyr Sokol. Adaptive learning and flexible assignments framework for challenge-based learning.....	643