These may include computer vision technologies for product recognition, machine learning algorithms for fraud prevention and product weight determination, and voice or text instructions for users.

In conclusion, Artificial Intelligence is revolutionizing various sectors, enhancing education, simplifying daily tasks through personal assistants, optimizing travel with smart navigation, personalizing digital experiences, and streamlining banking, finance, and shopping processes.

This underscores AI's critical role in modern society, driving innovation and efficiency. As we leverage Artificial Intelligence, it's crucial to consider its ethical implications to ensure technology enriches human potential responsibly.

Scientific supervisor: Olena HURSKA,
PhD in Pedagogy, Associate Professor

Andriy CHOPEK
National Aviation University, Kyiv

ON THE DEVELOPMENT OF ARTIFICIAL INTELLIGENCE

Before delving into the realm of artificial intelligence (AI), let's rewind to the basic concept of intelligence itself. What does it mean to recognize intelligence, whether in a dog or a human? It often involves observing behaviors that go beyond instinct, such as a dog catching a ball or a child learning to solve problems. In this context, intelligent behavior extends beyond biological instincts and aims to achieve specific goals, often involving the ability to learn and improve.

Humans, driven by an insatiable curiosity, started to ponder whether machines could exhibit intelligent behavior. This curiosity led to exploring computer science, searching for the connection between a program and a computer analogous to the link between the mind and the brain. To instill intelligent behavior in machines, scientists developed the concept of machine learning, the foundation of AI. In essence, AI involves computer programs or robots endowed with the ability to learn and improve, solving problems traditionally performed by humans or other intelligent entities.

Various definitions of AI exist, each capturing different facets of its complexity. AI is described as a branch of computer science that simulates intelligent behavior in computers. It is defined as the capability of a machine to imitate intelligent human behavior. Another definition characterizes AI as a computer system able to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.

In his book, "Introducing Artificial Intelligence: A Graphic Guide," Henry Brighton categorizes AI into two forms: Strong AI (Artificial General Intelligence or AGI) and Weak AI. AGI is an intelligent machine capable of performing all tasks like a human, while Weak AI can solve specific problems or perform designated tasks.

The term "AI" was coined in 1956 by John McCarthy during the Dartmouth Summer Research on AI workshop. The researchers aimed to clarify and develop ideas around "thinking machines." McCarthy chose the name for its neutrality, avoiding favoring one specific approach to achieving "thinking machines." The proposal for the conference envisioned machines simulating every aspect of human intelligence.

In the contemporary context, AI is viewed as a sub-field of computer science, focused on creating systems capable of performing tasks that traditionally require human intelligence. The objectives of AI development can be categorized into building systems that emulate human reasoning precisely (strong AI), getting systems to work without necessarily replicating human reasoning (weak AI), or using human reasoning as a model without making it the ultimate goal.

Let's explore some current applications to make the connection to AI more tangible. AI is now actively employed in various fields, such as healthcare for medical diagnosis, finance for fraud detection, and autonomous vehicles for intelligent navigation. These applications demonstrate how machines are exhibiting intelligent behavior by learning from vast datasets and adapting to complex situations.

The evolution of AI technology has been remarkable, progressing from rule-based systems to the current emphasis on machine learning and neural networks. Milestones and breakthroughs have shaped AI into a dynamic and rapidly advancing field.

However, as AI advances, it brings forth challenges and ethical considerations. Bias in AI algorithms, concerns about privacy, and the responsible development of AI systems are critical issues that demand

attention. Society is grappling with the implications of integrating AI technologies, from potential job displacement to the ethical use of AI in decision-making processes.

Looking ahead, the future of AI holds exciting possibilities. Emerging trends include advancements in natural language processing, computer vision, and developing more sophisticated AI models. These trends can potentially revolutionize various industries and further integrate AI into our daily lives.

In conclusion, AI represents a journey of exploration and innovation, from the early days of envisioning "thinking machines" to the current era of practical applications and ethical considerations. As we navigate the future of AI, it is essential to strike a balance between technological advancements and ethical responsibility, ensuring that AI continues to contribute positively to society.

Scientific supervisor: Tetiana SHULHA,
Senior Lecturer

UDC 004.5 (043.2)

Illia DEMCHENKO
National Aviation University, Kyiv

CYBERCRIME IN BANKING BUSINESS

The banking business was one of the first to take advantage of the benefits of working in cyberspace, which is due to a significant reduction in operating costs: there is no need to maintain bank offices, and the functions of the operator are performed by the client himself using a computer, tablet or smartphone.

However, along with the obvious attractiveness of this method of conducting banking operations, there are also many additional risks (both for the bank and for its clients), the sources of which are the virtual nature of remote banking operations and the constantly increasing activity of cybercriminals, whose main goal is the illegal seizure of bank funds and (or) their clients, as well as their personal data.

Cybercrime, having a high degree of latency, remains one of the main deterrents to the spread of electronic banking systems in the credit and financial sector. In this regard, the development of scientific approaches to