

## **INTEGRATION OF ARTIFICIAL INTELLIGENCE INTO UNMANNED AERIAL VEHICLES AND ITS PRACTICAL USE IN CIVILIAN AND COMBAT CONDITIONS**

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The study is conditioned by the need to highlight the widely usage of artificial intelligence in unmanned aerial vehicles in both civilian and military applications. The development of software engineering does not stand still, and artificial intelligence has added human-like features to unmanned systems. Stimulating the detection of criminal and other offenses by optimizing the involvement of police officers in operational and investigative activities through AI-equipped UAVs. The study uses the dialectical method to assess the dynamic development of artificial intellect for demonstration of the highest results of using unmanned aerial vehicles in many fields.

The use of artificial intelligence (hereinafter referred to as AI) in the context of rapid digitalization and the development of the latest technologies is gaining more and more demand every day not only in education, science and certain theoretical areas, but also in industries where the practical application of technical means must be adapted to the changing conditions of today and is impossible without demonstrating the highest results to achieve a certain goal. In today's world, it is impossible to imagine many areas of activity, including law enforcement, without the use of unmanned aerial vehicles (UAVs), which are widely used in both civilian and military applications. AI significantly improves the efficiency of UAVs, and its latest inventive abilities are truly impressive. The first developments with UAV artificial intelligence began, of course, with the ability of drones to track and move behind an object. This system uses computer vision and AI to identify objects, recognize their movement, and continue tracking without additional pilot action. Such a function is important for the operational work of law enforcement agencies in the form of tracking criminals and stolen cars, and during hostilities it is indispensable for monitoring the frontline situation, convoy movements, enemy movements and deployment, as well as reconnaissance activities without the presence of manpower, which

undoubtedly saves many lives. Another option for using AI in UAVs is to perform combat missions in the face of electronic warfare (EW), which is designed to break the connection between the pilot and the drone. AI is able to recognize the effects of EW, as well as to make an emergency landing or return the drone to counteract its loss, which reduces material damage, as the cost of the drone is currently fully consistent with its undeniable benefits at the front. In exploring this topic, it should be noted that an AI-assisted control system can work not only for a single UAV, but for a whole range of devices that interact with each other.

The corresponding software integrates them into a single network for more efficient use and targeting of the drone in a topographic way, i.e. when one drone loses communication with the satellite, the other intercepts the signal and continues to work, which allows for a more successful prediction of the course of the task. In addition, the Law enforcement agencies are also scaling up the use of UAVs while on duty, with programmers developing a special AI application to recognize faces that have been previously entered into a special database. This feature will allow law enforcement officers to increase the number of crimes solved in the future and improve the efficiency of public order during mass events. For example, rallies and mass gatherings where AI UAVs will be used to monitor people who have operational information about their involvement in offences that infringe on public safety or may be involved in preparing riots. Optimizing the search for individuals while recording all actions makes them versatile and indispensable, and their autonomy and ability to process large amounts of information far exceeds human resources.

AI algorithms significantly increase the accuracy and speed of analytical work of unmanned systems, making them an indispensable tool in the hands of defence structures, executive authorities and public associations. The development of unmanned systems in conjunction with the use of artificial intelligence will help us choose the best ways to optimize our work, open up new opportunities and technological advances in the future. Surveillance and monitoring inherent in AI provide a quick response to any changes in public order and security, and allow for a smooth response to various threats without risking the life and health of police officers. Conducting police operations to search for and detain offenders, real-time search operations, investigative actions, inspection of the scene of an incident, and high-quality collection of evidence – all this allows the National Police to increase the effectiveness of responding to statements and reports of criminal, administrative offenses or incidents, as well as to ensure further processes related to the proceedings in such cases.

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DOI <https://doi.org/10.36059/978-966-397-479-8-10>

## **СУБ'ЄКТИ ПЛАТІЖНОЇ ІНФРАСТРУКТУРИ ЯК УЧАСНИКИ ПРАВОВІДНОСИН У СФЕРІ ЗАХИСТУ ПРАВ СПОЖИВАЧІВ У МЕРЕЖІ ІНТЕРНЕТ**

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Розвиток електронної комерції, зокрема за останнє десятиріччя, обумовлює активізацію міжнародного та національного законодавчого регулювання у сфері онлайн-платежів та захисту прав споживачів [1]. Широка доступність інтернет-технологій та діджиталізація комерційних процесів надали змогу суб'єктам господарювання пропонувати товари та послуги глобальній аудиторії. Водночас споживачі отримали зручний доступ до широкого спектра пропозицій безпосередньо зі своїх електронних пристроїв.

Разом з тим, зростання кількості онлайн-транзакцій [2] призвело до формування складної екосистеми суб'єктів платіжної інфраструктури, що беруть участь у процесі оброблення та проведення електронних платежів. Крім традиційних учасників правовідносин у сфері захисту прав споживачів (продавці, постачальники послуг, споживачі), вагоме місце