Управление данными: Корпоративные сети используются для управления и хранения больших объемов информации, генерируемой финансовыми учреждениями, включая данные о клиентах, финансовые отчеты, данные о транзакциях и рыночные данные.

Коммуникации: Финансовые учреждения используют корпоративные сети как для внутреннего, так и для внешнего общения, включая электронную почту, мгновенные сообщения и видеоконференции. Эти сети также облегчают сотрудничество между сотрудниками, работающими в разных местах.

Торговля: Финансовые учреждения используют корпоративные сети для доступа к рыночным данным, проведения торговых операций и оптимизации исполнения сделок. Эти сети также обеспечивают безопасность и целостность торговых операций.

Управление рисками: Корпоративные сети используются для мониторинга и отчетности о подозрительных действиях и управления рисками, связанными с финансовыми операциями и инвестициями, обеспечивая соответствие требованиям регулирования и безопасность.

Соблюдение: Корпоративные сети играют ключевую роль в обеспечении соблюдения финансовыми учреждениями требований регулирования и внутренних политик. Они упрощают мониторинг и отчетность по соблюдению.

Обслуживание клиентов: Финансовые учреждения используют корпоративные сети для предоставления поддержки и услуг клиентам, включая интернет-банкинг, мобильный банкинг и цифровые каналы. Эти сети также обеспечивают безопасность и конфиденциальность информации о клиентах.

## Заключение

В заключение, функционирование корпоративных сетей является ключевым и сложным вопросом для финансовых учреждений. Принципы и шаги, обсуждаемые в этой статье, помогают эффективно управлять этими сетями и позволяют финансовым учреждениям предоставлять высококачественные, безопасные и эффективные услуги своим клиентам.

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### PROCESSING THE GUARANTEE OF ONLINE PARKING RESERVATION PROGRAM

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#### **Abstract**

This article discusses the analysis and resolution of structured and unstructured problems in the field of transportation, the use of artificial intelligence and technological capabilities, and research in various fields related to transportation research, such as hybrid data sets, neurology, deep learning, and object recognition. In addition to this, the analysis of current issues and their adaptation in terms of time and financial benefits in almost all areas has been applied in the analysis of the Ministry of Transport.

**Key words:** Deep Learning, Neural Network, Machine Learning, Object Recognition, Python, Yolo, YoloV3.

### Introduction.

In today's world, automation, economic development, urbanization, and population growth have led to an increase in the number of vehicles, making parking problems more prominent and acute. Finding parking spaces and securely storing vehicles in the city has become one of the most pressing issues for people when commuting, traveling, shopping, or attending to other daily needs. The solution to such parking and transportation problems is online parking reservation. In this article, we will explore what online parking should be, what functionalities it should possess, how it should operate, and we will analyze and systematize the benefits of this system for drivers, pedestrians, businesses, and city authorities. Online parking is a system that allows drivers to place their vehicles in parking spaces and make reservations for them online, all without any physical interference. In this system, drivers can control the system, find and reserve a parking space using online maps, control their vehicles at the designated location, and make online payments using card services. City leadership, government, and private parking owners can also use this program to control and manage parking spaces remotely and efficiently.

The Role of Deep Learning and Object Recognition in Discovering Transportation

Deep learning is one of the most important branches of artificial intelligence and is a type of machine learning. It is used to obtain, analyze, and develop machine data and teach machines by using neural networks, including sequential and YOLO-type control algorithms. This technology and similar libraries are widely used in various fields, especially in technological fields when processed on a large scale using massive data. To use deep learning and gain a deeper understanding, it is important to realize that machines can autonomously analyze and interpret data independently of human influence. Neural networks are crucial in this context, as they resemble the structure of the human brain, particularly in the technical process area, and play an important role in the sequential analysis of data using these methods. Image 1: Neuron networks process incoming data to produce a single result.

Neural networks, inspired by the functionality of the human brain, align and analyze data to learn from various information. Neural networks take in any object based on any number of classified characteristics and provide a single result (Image 1). Deep learning also plays an essential role in various fields, such as technical analysis and management, data analysis, and classification based on general characteristics. It is used in multiple areas, including the analysis and prediction of images and audio data. In the context of object recognition, artificial intelligence plays a key role in simplifying the use of new technologies for researchers. It is equipped with the most modern algorithms that make it possible to analyze unknown processes and learn more about them. Object recognition is a sequential process used to make analyzing and comprehending unknown objects or subjects easier and more precise. The fundamental stages of this process are as follows:

Event Identification: In the initial step of object recognition, the controlled portions are selected to better understand and identify the object or subject of interest. Factors that accelerate the recognition process are included in this stage.

Preparation of the Analysis Plan: Establishing an analysis plan is crucial for a more detailed and comprehensive study of the object or a clearly defined subject. The result of this analysis determines how

the object is taught in-depth through different sequences and how it should be understood. The analysis preserves the specific characteristics of the object.

Control and Analysis: In this phase, experiments are conducted to gather all the information about the object's actions and characteristics. This aids in collecting and analyzing the controlled object in detail. Collection and Explanation of Results: Observations are prepared and analyzed. This is done to express the characteristics and information of the controlled object more clearly. Observers convert the obtained analysis results into graphics and prepare standard information to learn more about the object.

Analysis of Acquired Results: Observations' results are transferred and explained. These results are critical in explaining the importance and ultimate goal of the object.

Sequencing of Results: The results of observations are prepared for sharing through articles. Sharing these results is a crucial step in transferring the object's information to other observers and colleagues. Object recognition greatly supports analysts in gaining new knowledge and understanding subjects more clearly. This process shapes the foundation of analysis and finds a way to discover the unseen. When working with artificial intelligence, the use of YOLO algorithms and the establishment of

When working with artificial intelligence, the use of YOLO algorithms and the establishment of algorithmic structures.

YOLO (You Only Look Once) is an algorithm that falls under the umbrella of object recognition methods in computer vision, working with images displayed on computer screens. This algorithm has consistently been one of the most recent and modern technologies used for object recognition and development since 2016. YOLO algorithms introduced different system and structure open-source libraries, allowing for sequential processing and the preservation of a wide range of symbol color palettes, which are quickly adopted by various programs and systems. The goal of YOLO algorithms is to analyze and systematically interpret the objects using framing methods and formulate results. YOLO algorithms also stand out with their use of sequential and deep learning-based structures and algorithms, which are essential for object recognition and are even further developed in new versions (Image 2). YOLO's unique advantage is its ability to extract near-perfect frames in its established sequences, making it easy to select objects. Here, objects are sketched from various angles, and the obtained results are classified based on different characteristics. YOLO structured algorithms continue to evolve by adding them to other algorithms, especially in the v5 neural networks, which allows for faster processing and capturing real-time reactions of objects.

Image 2: Analysis of object detection using YOLO algorithms with framing.

Modern technologies like YOLOv4 and YOLOv5 create algorithms with reduced error margins, which lead to clearer and faster object detection through framing (Image 2). These algorithms significantly improve the speed and quality of object recognition. YOLO algorithms are also used in various applications, including enhancing network security, analyzing and detecting medical conditions, and automating real-time systems. Additionally, they are employed in managing different layers of work, analyzing developments, and assessing the quality of established systems. In this section, we discussed the advantages provided by YOLO algorithms, the principles they adhere to, and specific detection versions. We also explored how this system operates and the demands coming from various locations and institutions. These algorithms are essential for further enhancing the systems currently in use.

# **Conclusion**

The establishment of online parking not only alleviates traffic accidents and perpetual congestion in the city but also ensures time efficiency through registration and control. Research has shown that this process can be effectively addressed with artificial intelligence, not only in managing roadways but also assisting law enforcement agencies in identifying individuals and stolen property. YOLO algorithms are among the most advanced technologies for object detection, and their libraries allow for precise real-time

location identification and framing accuracy. In the established structure, online parking offers several advantages, including time savings, environmental preservation, increased revenue, and enhanced safety and traffic security. The system is primarily based on the Python programming language and is structured in terms of architecture. Overall, it retains the functions of traffic monitoring and management at the state level and in the broader market.

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# SAYTLARA ZİYAN VERƏN XSS HÜCUMLARININ NÖVLƏRİ

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#### Xülasə

Məqalədə XSS hücumları anlayışı haqqında ətraflı araşdırmalar aparılmış, geniş şəkildə yayılmış XSS hücumlarının növləri qeyd olunmuşdur. İstifadəçilərin və proqramçıların məruz qaldığı bu hücumun növlərinin ayrı-ayrılıqda fərqləri izah olunmuşdur. Həmçinin XSS hücumlarının yaranma səbəbləri və onlardan qorunma yolları müəyyənləşdirilmişdir. Əlavə olaraq XSS hücumlarının yaratdığı zərərlərə əsasən veb tətbiq növləri araşdırılmışdır. Bu hücumlar tətbiqlərə göstərdiyi ziyanların nəticəsində tətbiqlərdə baş vermiş dəyişikliklər təhlil edilmişdir. Qeyd olunan dəyişikliklərlə bağlı araşdırmalar aparılmış və onların aradan qaldırılması üçün müəyyən tədbirlər görülmüşdür.

**Açar sözlər:** Cross Site Scripting (XSS), Document Object Model, zərərli hərəkətlər, Reflective XSS, hücum növləri, Stored XSS

Giriş. Son günlər Azərbaycanda bəzi saytlara qarşı hücumlar intensivləşib. Hücumlar xarici ölkələrdən həyata keçirilsə də sifarişçilər adətən rəqiblər və yaxud digər maraqlı şəxslər olur. Veb saytın hazırlanmasında ən mühüm məsələ o saytın təhlükəsizliyidir. Dağıdıla bilməyən veb sayt yoxdur. Hər saytın zəif cəhəti ola bilər. Sadəcə, onu dağıtmaq və ya müdaxilə etmək istəyən hakerin gücündən çox şey asılıdır. Haker nə qədər güclüdürsə, veb sayt bir o qədər zəifdir. Ümumiyyətlə, informasiya təhlükəsizliyi elə bir problemdir ki, onun qarşısını tam şəkildə almaq mümkün deyil. Cross Site Scripting (XSS), təcavüzkar veb tətbiqini istifadəçinin brauzerinin icra edə biləcəyi formada məlumat göndərmək