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Cyber-Security Attacks, Prevention and Malware Detection Application

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Abstract. The internet has become more or less, for most of us a dangerous place to live, work and relax when no proper measures are taken, and the response to incidents is not very clear and well implemented, both for organizations and individuals. This paper makes a short overview of current types and incidents of cyber-attacks, as well as the current state of threats, and the grade of awareness worldwide. Some methods to prevent cyber-attacks, malware analysis, and threat hunting, are presented, too. The paper also contains an application developed with a series of APIs that link the application to open-source tools and activate them, hence analyzing the content of the possible malicious files.

Keywords: malware, ransomware, social engineering, phishing, crypto-jacking.

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Searching Algorithm in a nonrelational database

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Abstract. The problem of the data growth and it is storing to the nonrelational data-bases is related to their decreasing efficiency of searching. Nowadays, a very popular database in memory will help us with decreasing the efficiency of the operation searching in this paper. This paper examines the data search-ing in applications hosted in cloud service Amazon with using of nonrela-tional database DynamoDB. It develops new procedures to provide faster response to user and to obtain the data using of nonrelational database Dy-namoDB, that will provide the demanded data and subsequently, it will transfer them to the memory. The given procedure is based on two methods. The first method is a recognition of values, to which the user refers and the provision of this data to the database in memory. The second method is re-lated to the automatic storing of the data transferred to the database in memory. We perform various experiments in the paper, which are showing us a border of efficiency respectively inefficiency from a time perspective.

Keywords: selecting data, SQL database, NoSQL database, cloud.

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System of Automatic Recognition of Video Text Amazigh based on the Random Forest

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Abstract. In this paper; we introduce a system of automatic recognition of Video Text Amazigh based on the Random Forest. After doing some pretreatments on the video and picture, the text is segmented into lines and then into characters. In the stage of characteristics extraction, we are representing the input data into the vector of primitives. These characteristics are linked to pixels' densities and they are extracted on binary pictures. In the classification stage, we examine four classification methods with two different classifiers types namely the convolutional neural network (CNN) and the Random Forest method. We carried out the experiments with a database containing 3300 samples collected from different writers. The experimental results show that our proposed OCR system is very efficient and provides good recognition accuracy rate of handwriting characters images acquired via Video camera phone.

Keywords: Pretreatments, Video Text Amazigh, Mobile phone, OCR, CNN, Random Forest.

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Investigating Different Social Media Platforms Used by Tourists to Book a Hotel in Greece

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Abstract. The tourism industry has been recognized as one of the largest economic sectors in Greece. The expansion of social media has contributed to introducing new digital marketing tools and changed the way tourists acquire and digest information in the decision-making process to book a hotel. The aim of this quantitative research is to investigate the different types of social media platforms used by tourists to book a hotel in Greece. Descriptive analysis was employed to analyze the data (N= 171) from tourists in Greece. The findings revealed that the majority of participants used TripAdvisor, Instagram and Nikana.gr to book a hotel in Greece, followed by grecia.directbooking.ro and Booking.com receiving lower percentages. Moreover, the guests' reviews of the hotel, the photos and shots of the hotel on the social media platforms and special offers and discounts on hotels' social media were the three main participants' criteria for choosing social media to book a hotel. This study provides an insight for all the relevant stakeholders involved with social media in the travel and hospitality sector more specifically in the hotel field in Greece.

Keywords: Social media, tourism, hotels, booking, decision-making.

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Risk Disclosure as a Way to Increase the Informative Value of Corporate Reporting for Stakeholders

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Abstract. The article is devoted to the study of risk as a category of accounting and reporting and substantiation of directions for comprehensive disclosure of risks in order to increase the informative value of corporate reporting for stakeholders. The article shows the development of approaches to the definition of risk and provides an updated definition of risk in accordance with modern concepts. A classification of risks is proposed in the context of the concept of multiple capitals and the concept of sustainable development, which is relevant to the task of adequate disclosure of information about risks. It is demonstrated that the modern legal regulation of accounting, standards and guidelines in the field of corporate reporting assigns an important role to risks. Based on an empirical study, the recommended limits for the disclosure of information about risks by organizations in the framework of ensuring the transparency of reporting are determined. The factors stimulating economic entities to disclose information on the risks of sustainable development in corporate reporting are considered. An assessment is made of the impact of digital tools and technologies on the ability to predict, assess and disclose risks in corporate reporting, as well as on the effectiveness of decisions of organizations' stakeholders.

Keywords: risk classification, ESG risks, risk disclosure, corporate reporting.

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