2nd Conference of Projects on Information Technologies

COPIT-2 / 2023

June 14, 2023

Erbil, Kurdistan Region-Iraq

BOOK OF ABSTRACTS

2ⁿᵈ Conference of Projects in Technology,
COPIT-2/ 2023

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Foreword:

The Second Conference of Projects in Technology (COPIT2-2023), entitled "Igniting Innovation through Information Technology" took place on 14th June 2023. This conference was organized by the Information Technology department at Tishk International University. The department holds accreditation from ZeVA agency in Germany, providing IT students with the opportunity to pursue postgraduate studies in Europe without the need for additional equalization processes and qualification assessments. The IT curriculum is regularly updated to align with market demands and the latest technology trends. Since 2012, the IT department has successfully graduated over 550 students who have secured employment with reputable companies in the region. These graduates have received education from highly qualified teaching staff and research assistants from diverse educational backgrounds and nationalities.

COPIT-2 conference was established with the aim of showcasing student contributions in various IT-related fields such as programming, data communication and networking, web and mobile applications, graphic design, security, and artificial intelligence. The conference provides students with a platform to present their abstracts, results, and conclusions, which are then published in the conference proceedings with ISSN/ISBN. The presented works undergo thorough scrutiny, enhancement, and evaluation by esteemed internal

and external professors, ensuring the development of high-quality projects and fostering students' contributions.

In an exciting development, this year's conference featured projects from other universities in addition to TIU, including Erbil Polytechnique University, Komar University of Science and Technology and Koya University. This expansion highlights the growing collaboration and participation of multiple institutions, enriching the conference with a diverse range of innovative projects and ideas.

Prof Dr. Faiq H. S. Hussain
Chair of COPIT-2023

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Automated Recycle Classification Machine

Andro Abduljabbar Hawel, Mubin Kordo Sabah, Osamah Jakhsi Hassan, Rebin M. Ahmed

Information Technology Department, Faculty of Applied Science, Tishk International University, Erbil, Kurdistan Region, Iraq

ABSTRACT

This project presents the development of an automated recycling machine that incorporates state-of-the-art technologies to streamline the recycling process. The machine combines a camera system, machine learning models, servo motors, and a Raspberry Pi controller to accurately identify and sort different types of recyclable materials. By employing machine learning algorithms trained on a large dataset. The initial model yielded a modest accuracy of 33%, highlighting the need for further development. Subsequent iterations of the model resulted in accuracies of 81% and 78%, showcasing incremental progress. The final model, after addressing overfitting challenges, achieved an impressive training accuracy of 85% and an even higher test accuracy of 91%. The successful implementation of the recycling machine underscores its potential to revolutionize recycling practices, reducing human intervention and bolstering sustainability efforts. Future work entails refining the hardware setup, exploring alternative energy sources like solar power, and expanding the model's classification capabilities to encompass a broader range of recyclable materials.

Gella, Text processing and spell-checking System

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ABSTRACT

This project, presented a website called Gella, designed to assist users in processing the Kurdish language. The website aims to help Kurdish language users, including students, researchers, journalists, and authors, in creating errorfree paragraphs and documents. The project focuses on text processing tools, including a spellchecker, correction of non-Kurdish characters, punctuation fixing, number formatting, item listing, and sorting. The Levenshtein distance algorithm is utilized for spellchecking, providing suggestions for misspelled words based on a dictionary. The website also incorporates the Central Kurdish Wikipedia API to import articles as examples. The implementation of the project involves HTML, CSS, JavaScript, and jQuery. The website offers a user-friendly interface with live highlighting of misspelled words and bad words along with various issues. To make it easier for users to recognize the type of issues, the website categorizes the identified issues into different categories and uses distinct colors for each category. This visual distinction enhances the user experience and allows users to quickly identify and address specific types of errors or issues. Users can simply click on the specific colors associated with each category to navigate and focus on the next issues within that category. This feature enables efficient issue resolution and helps users maintain their workflow without unnecessary interruptions.

Age and Gender Detection System

Botan Mariwan Nuraddin, Saeb Tahsin Yahya, Eman Hiwa, Saman Mirza

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ABSTRACT

This study focuses on the computer vision field, in which computers are enabled to identify and recognize images and moving objects just like a person would. Challenges in such studies are primarily caused due to incomplete understanding of the logical vision. To extract high-dimensional data gathered from the real world and create symbolic or numeric information that may be used to make decisions, computer vision includes gathering, processing, analysis, and understanding of computer images. The concept of computer vision has been utilized in this work to build an intelligent system that can predict a person's age and gender. Using a webcam or inputting an image into the system, the system can predict the age and the gender of the face in the image it sees. If time remains, the system will be applied on OpenCV to let it work and predict the live situation. Moreover, the system can be implemented in a way it counts the number of male and female people it has seen so far. This can be advantageous during fairs and conferences to let the organizers know their visitors better based on age and gender.

IT Trending News Website

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ABSTRACT

Technology is evolving at a rapid pace. Every day, new innovations, solutions, and issues emerge. It is vital for a technology enthusiast to remain updated on new technologies and challenges. Therefore, there is no better way to accomplish this than to have a reputable tech news source that provides the users with regular updates on the fields of technology such as artificial intelligence, IT project management, cybersecurity risks, machine learning, and so on. As a result, the goal of this research is to create and implement an IT trending news website that offers site visitors the most recent trending news in the technology field and opens a chance for industry professionals and specialists to share their observations and points of view. The website is also created with two dashboards: an admin dashboard for managing the website and an author dashboard for authors to manage their posts. The SDLC (systems development life cycle) method is utilized to create the IT trending news website. The outcome of this research is the IT Trending News Website, which seeks to provide site visitors with the latest trending news in the technology field. This research was completed successfully based on the results of functional tests performed using the Black Box Test method, which reveal that the website's functionality works as expected.

Ferge (Online Educational Platform)

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ABSTRACT

After Edmodo app closed, there is not a lot of applications available for educational purpose (students, teachers), recently we as student of Tishk International University are using SIS system and every time we are facing a lot of issues like having trouble sending assignments and also no notifications which is students cannot be aware of new updates and daily tasks ,our aim is to create a website (web application) to help educational organizations to have an application which is responsible for interactions between teachers, students and parents, creating accounts for users such as teachers, students and parents to be able to see daily activities such as assignments and quizzes and etc. We will also create a Calendar where students can see upcoming quizzes and deadlines for assignments. we will create a chatting system where users can interact. What we will do is to make accounts for multiple users (Super admin, admin, Teacher, Student), whereas teachers can post educational activities where students can also submit their assignments and users can chat together through the Web application.

Orphanage Support Web-Application

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ABSTRACT

Websites are an essential part of today's digital world for marketing organizations that help old people, patients, or orphans. The development of a web-based application aimed at assisting orphanage organizations is the primary focus of this project. Users of the web-based application can browse a public website, sign in, and use numerous capabilities including data analysis and content management. This website seeks to develop an effective management system for Non-Governmental Organizations (NGOs) that support orphans by using a MySQL database, PHP as the backend technology, HTML, CSS, and JS as the frontend technologies. This web-based system's main goal is to make it possible for NGOs to efficiently track and manage donations and donors. These organizations can spread awareness of their cause, interact with donors, and have a beneficial influence by developing a strong internet presence that has a positive impact on orphans' lives and future.

TIU Virtual Tour Guide Application

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ABSTRACT

The Virtual tour guide application aims to create a 3D virtual representation of our university campus, encompassing all departments, laboratories, clinics, restaurants, sports fields, activities, and classes. This application provides an immersive experience for individuals who are interested in exploring the university. We are constructing a 3D model of the campus, incorporating all buildings, and allowing users to navigate and explore the university as if they were physically present. The models were created based on the university's CAD drawings, and realistic models were developed using Autodesk 3Ds Max. The application's materials, movements, and final build were created using Unreal Engine for the Windows platform. Additionally, we intend to showcase our university's unique features and highlight the technological advancements. This application has the potential to generate interest in our university and provide a glimpse of the exceptional education provided by Tishk University.

Self-Parking Car Prototype

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ABSTRACT

Studies show that 70% of car accidents are happening while they are parking, so self-parking cars can reduce the dangerous and also reduce the amount of time that was taken for drivers that have poor driving skills. A self-parking automobile system prototype design and implementation is explored in this study. The technology that will be used consists of a variety of sensors, such as cameras and ultrasonic sensors, to detect the environment around the car and an algorithm will be developed and implemented to identify the best approach for self-parking. The specific requirement is that without human assistance, the car can drive itself into a parking space. In a controlled setting, the system's ability to accurately and successfully park the car will be demonstrated. This prototype aims to improve the self-driving car abilities while simultaneously lowering number of accidents brought on by negligent parking.

A Website: Erbil Properties

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ABSTRACT

Nowadays, the real estate industry plays a significant role in the marketing of business activities in our cities, as there are countless companies and real estate agents in every neighborhood. In this research paper, we will identify a website that aggregates the majority of Erbil's real estate agencies. By having such a website, real estate agents and businesses will be able to reach a large audience, particularly those who are unable to acquire offices. The website provides a set of data containing all the information about selling, purchasing, and renting properties of any kind. This research consists of various subtopics pertaining to the project's progression; an explanation of the significance and efficacy of digital marketing in real estate, as well as the issues of offline marketing and the obstacles to obtaining information about the real estate business. In addition, the website's components and data organization will be demonstrated.

Automatic Fire Extinguishing System

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ABSTRACT

A fire extinguishing system is an engineered collection of parts that cooperate to detect a fire in a very short time, warn residents, and put it out before it causes significant damage. Water suppression systems are suitable for extinguishing most of the fire, but they are either ineffective or unsuitable for extinguishing in areas where flammable liquids are stored, or places that contain electronic devices. This Research introduces a system for fire extinguishing at the height of ceiling of buildings. We have continued to improve on previous studies. It is an improvement of the system which detects the fire automatically and perform the extinguishment. In this system, image processing is utilized to detect whether there is a fire, and an infrared sensor is used to confirm this, the nozzle is then automatically pointed at the fire position to extinguish the fire. The proposed system has some feature to improve fire extinguishing compared to the other systems.

Painting and Waterproofing Service Website

Khansa Suad Sabir, Rayan Fahad Mohammed, Rukhsar Taha Zahir, Hala Najwan Sabeh

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ABSTRACT

Painting and waterproofing services are essential for both commercial offices and residential homes. Locally skilled painters do not have an integrated website that promotes their services and attracts new customers. As a result, the objective of this research is to create and implement a website for painting and waterproofing services with the intention of assembling a group of qualified local painters who will be working with the site's developers to advertise their services online to the public via the developed website. The services are displayed on the website's home and services pages with the title and category. By clicking the title, you can see the entire post in detail. Customers can browse the website's services and view the workers' previous work. Furthermore, customers can fill out the free estimate form, and a website representative will respond within 24 hours. The systems development life cycle (SDLC) method is used to create the painting and waterproofing services website. The result of this study is the painting and waterproofing service website, which aims to link potential customers with locally skilled workers. This research was successfully carried out based on the results of the functional tests using the Black Box Test method, which show that the functionality of the website runs as planned.

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Instructor's Availability System

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ABSTRACT

Instructor's Availability System is a solution designed to efficiently manage instructor availability. By leveraging Arduino technology, the system ensures reliable and accurate outcomes. Instructors can focus on their work uninterrupted, as the system eliminates the need for constant inquiries about their availability. With a wireless setup using Wi-Fi connectivity, the system consists of a sensor inside the office and an LED light board next to the office's exterior door, providing a clear visual indication of an instructor's availability status. By implementing this system, organizations can streamline operations and enhance overall efficiency in managing instructor or employee's availability, ultimately benefiting both employees and the organization as a whole.

FYP Project Management System

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ABSTRACT

Final Year Project management is software that will provide a medium for team members to work together without any difficulties. This project aims to provide a solution to the problems that are unsolved in the project management industry, such as providing excellent customer support to those that need it and eliminating any or all issues that are otherwise avoidable. Interface responsiveness is one of the priorities and ease of use for individuals using such a service with little to no prior experience. After reviewing other services that aim to provide a similar solution to collaborative projects, research shows that most of the said services are only accessible through an expensive subscription or a highly-priced one-time payment, our aim is to provide an alternative product that eliminates those issues as well as build upon what they provide in a positive sense.

IP Subnetting: Efficient Address Management for IPv4 and IPv6 Networks

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ABSTRACT

The project seeks to create a user-friendly and efficient subnetting system for IPv4 and IPv6 networks. The system will use a web interface and a mobile application to streamline the subnetting process and reduce the likelihood of errors or inconsistencies. Users will be able to input network and host details and generate subnetting information, including subnet masks, network and broadcast addresses, and available IP ranges. The resulting system for networking professionals and students will be accessible and practicable, with potential applications in academic and professional settings. By streamlining the subnetting procedure, the project aims to enhance IP address administration, boost network performance, and promote efficiency in a variety of settings.

Tishko Car Racing 3D Android Game

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ABSTRACT

This research explores the development of an immersive and visually captivating racing video game, with the aim of capturing players' attention and providing an engaging gameplay experience. The significance of this work lies in addressing the need for high-quality racing games in the current gaming market, particularly the scarcity of games that represent diverse cultures and regions. The research investigates the problem of limited Kurdish-made racing games by utilizing modern game development techniques and technologies. The approach involves employing advanced game engines and graphics tools to create captivating visuals and seamless gameplay mechanics. The results demonstrate the successful achievement of a visually stunning racing game with optimized performance across multiple platforms. These findings contribute to the gaming industry by showcasing the potential for cultural representation in video games and inspiring other developers, especially students and aspiring game developers, to explore their creative potential. This thesis effectively fulfills its objectives by developing an immersive racing video game while promoting the culture of game development and inspiring further innovation within the field.

Remotely Controlled Car Using Voice and Joystick

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ABSTRACT

The primary problem with all currently existing robotic systems has always been price. These systems were created utilizing a variety of different system components that are either hard to get on the market or extremely pricey and out of reach for most people. Raspberry Pi helps in the implementation of affordable security solutions that may be used to several tasks. Our goal in this project is to use voice commands to drive a robot automobile. In order to process human voice instructions in a mobile application and transfer them to the wirelessly operated automobile, Google Assistant will be used. The robot has computer vision capabilities that allow it to identify objects that an ultrasonic distance sensor is unable to pick up. Testing after deployment reveals that the robot will obey commands until a front or back camera detects an obstruction, at which point it will halt.

Students' Smartphone Addiction and its Negative Impacts

Muhammed Muhsin Hadiatullah, Hezha Muhammed Salih, Awin Mahdi Salih, Togzhan Nurtayeva

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ABSTRACT

This research investigates smartphone addiction among students in Erbil, Kurdistan, in an effort to raise awareness about its prevalence and negative impacts. To gain a comprehensive understanding of the problem and its consequences, research was conducted at numerous Erbil institutions. The data reveal a high prevalence of smartphone dependency among students, highlighting a rising issue in the region. This study sheds light on the factors that contribute to this addiction, such as excessive smartphone usage, active use of social media, and dependency on mobile applications. The detrimental effects of smartphone addiction on multiple aspects of students' lives, such as academic achievement, social connections, and mental health were examined. This study aims to initiate a conversation among students, educators, parents, and policymakers about smartphone addiction and its negative consequences, leading to the development of strategies and interventions to reduce the negative effects of smartphone addiction on students in Erbil, Kurdistan.

TIU Research Center Flutter App

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ABSTRACT

The TIU Research Center project aims to enhance the efficiency of the research process for both the head of the Research Center and the staff by introducing a centralized platform to manage research plans and progress. This eliminates the need for multiple tools such as Google Documents and MS Excel, which are susceptible to errors and data loss. The system has been developed using Flutter for the front-end and Firebase for the back-end, providing a user-friendly interface and robust database capabilities. The integration of these technologies enables seamless communication between the front-end and back-end, facilitating real-time updates and secure data storage. Furthermore, the utilization of Firebase's built-in security features ensures that all data remains protected and accessible only to authorized users. In summary, the TIU Research Center system aims to streamline the research process, allowing the head of the Research Center and the staff to dedicate more time to actual research rather than administrative tasks.

Erbil Medical Record System

Mahshad Malashin, Halwest Sami Ahmed,Tara Shkur, Mohammad Salim

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ABSTRACT

The objective of this project is to develop a website-based medical record system to address the inefficiencies and challenges faced by healthcare centers in Kurdistan. One of the prevalent issues encountered in existing healthcare operations is the lack of critical patient information during initial interactions with doctors, leading to complications and misunderstandings. To overcome these challenges, a thorough literature review was conducted, encompassing an analysis of various electronic medical record (EMR) systems. Based on the findings, a system was meticulously designed and constructed from scratch, with the following key objectives: obtaining insights from experienced doctors to better comprehend their requirements, creating a user-friendly web-based interface, implementing robust security measures to safeguard sensitive patient data, and expanding the system's capabilities to encompass not only health center visits but also other medical interactions such as pharmacy visits. This project significantly contributes to the enhancement of healthcare services in Kurdistan by empowering doctors with swift access to patient data for precise diagnosis and treatment. The successful implementation of this system will alleviate the burden on patients, enhance communication between doctors and patients, and foster efficient healthcare practices.

Innovating web-based system for dormitory management

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ABSTRACT

The dormitory management system is a comprehensive software solution that automates administrative tasks, streamlines room allocation, and enhances the overall dormitory experience. It integrates advanced technologies like virtual reality (VR) and real-time updates, allowing residents to virtually explore room layouts and make informed decisions. The system offers functionalities such as user registration, room inventory management, real- time availability, online booking, and an interactive 3D map replica. Residents can virtually navigate through the dormitory, visualize room layouts, and select preferred rooms prior to booking, providing an immersive experience. Traditional dormitory management systems often lack efficient room allocation processes and visual tools for residents. To address these limitations, this project employs Laravel for the backend, React and Tailwind CSS for the frontend, and Figma for UI/UX design. Unreal Engine and Blender are integrated to create the 3D map replica, which can be explored using VR technology. The implementation of this system improves room allocation efficiency and enhances the overall user experience. The impact extends to decision-making, user satisfaction, and dormitory management efficiency. Future development may include automated ascendance management, maintenance request tracking, payment gateway integration, and further enhancements to the VR capabilities of the 3D map replica. This project contributes to the advancement of dormitory management systems, providing a solution that empowers residents and significantly improves the quality of student living.

Product Recommendation System for 1st LEXO Car Accessories Online Store

Mohammed Salahadin, Lava Taha, Bawar Abid

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ABSTRACT

A product recommendation system is a type of technology that is designed to suggest a product to customers based on their past behaviors, preferences, and interests. .it uses data mining techniques to analyze user data and generate recommendations that are relevant to their individual needs. Several e-commerce enterprises have emerged as a result of the rising popularity of online purchasing. Such a business is the 1st Lexo Car Accessories Online Store, which can offer a wide range of car accessories to customers. although, with a large number of products available, the customers can choose the best type of products that they need. A product Recommendation system can be used to provide personalized product recommendations to customers based on their preferences and past purchases. This system has some techniques such as collaborative filtering, content-based filtering, and hybrid approaches that can be used to suggest relevant and high-quality products to their customers. A product recommendation system can be designed using a machine-learning approach. which involves analyzing customer data, such as purchase history, browsing behavior, and demographic information to identify patterns and make personalized recommendations. Systems for making product recommendations may also include feedback components, like ratings, that used to improve the recommendations.

Prosthetic Hand

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ABSTRACT

Living as a disabled person is one of the crucial issues in today's life. Hand amputation is becoming a serious life-disturbing problem as the accidents and health problems that cause it increases. With the development of technology, every day a solution for a problem would be found that used to be impossible for solving. The conventional prosthetic hand had limited abilities for grasping, handling, and transcribing the muscular electrical current to mechanical activity. In this version of the prosthetic hand, an EMG sensor used to detect the potential electricity of the muscle, and send it to the microcontroller. Due to its flexibility, a microcontroller is used to control the movement of the fingers and joints through the SERVO motors based on the potential electricity. After finishing the manufacturing, a targeted group of hand amputees had been interviewed to get the response about the research. The prosthetic hand had been successfully made to fulfill the desire for functioning ability and interpretation of the electrical current in muscles. Although this model was greatly successful, but it could be updated by using lighter materials; and could be a hook for treating lower extremities (leg) amputation.

Digital Queuing System to Control a Demanding Process Using QR Code

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ABSTRACT

This project presents a digital queuing system that utilizes QR codes to control demanding processes in crowded places. The traditional methods of physical waiting locations could be more efficient and convenient, resulting in high costs and limited mobility. The proposed solution offers a technologically advanced and mobile-based approach, providing flexibility, efficient time utilization, and cost-effectiveness. Traditional queuing processes, current queuing systems, and priority queuing systems are compared to the proposed digital queue system using QR codes. The digital system allows users to scan QR codes to join and receive virtual tickets, providing average wait times and the number of people in line. This makes the system portable, scalable, informative, time-efficient, and cost-effective via a mobile app. The aim of the project is to provide mobile software for a smooth, modern, and time-saving queuing process, demonstrating software as an alternative solution to hardware-based systems. The main goals include implementing a First-Come-First-Serve (FCFS) technique for priority, ensuring usability for customers and employees, real-time data storage, prediction of waiting times, and a notification feature for customers.

The Impact of technology on modern day society

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ABSTRACT

This paper aims to examine the effects of technology on modern-day society and explore its implications for societal progress. Focusing on mental and physical health, social ability, education, and information acquisition, we conducted a survey among 100 peers and reviewed relevant literature to gain comprehensive insights. Our analysis included notable works such as Bimber's examination of technology's impact on democracy, Turkle's exploration of technology's influence on interpersonal relationships, Castells' study of the network society, and Carr's investigation into the cognitive effects of the internet. Our findings indicate that modern society is significantly impacted by technology. We observed an inverse relationship between technology use and sleep duration, exercise, and time spent with family. Additionally, technology use was associated with feelings of inequality. However, technology has had a positive impact on knowledge acquisition and as a source of news and information. It is crucial to recognize the complex nature of technology's impact and strive for a balanced approach to ensure individual well-being and social cohesion. Addressing the potential negative consequences of technology is essential for individuals, communities, and policymakers as we navigate the path toward a better society.

The Achievement of Healthy Life by Using AI in Agricultural

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ABSTRACT

The integration of artificial intelligence (AI) technologies into agriculture has garnered significant attention due to its potential to revolutionize traditional farming practices and address the challenges faced by the sector. This research paper aims to provide a comprehensive overview of the existing literature and reports on the utilization of AI in agriculture, exploring its applications, impact, and future prospects. The paper begins by highlighting the challenges faced by the agricultural sector, including population growth, climate change, resource scarcity, and the need for efficient resource allocation. Traditional farming practices often lack precision and struggle with optimizing production processes, managing crop diseases, and predicting environmental conditions accurately. The paper aims to review and analyze articles and reports on the use of AI in agriculture, covering aspects such as crop management, livestock monitoring, pest control, irrigation systems, and yield prediction. The objectives of the research include identifying and summarizing the applications of AI in agriculture, examining the associated benefits, identifying limitations and challenges, and highlighting future prospects and potential impacts of AI in agriculture. Additionally, the research aims to assess the advantages and disadvantages of the reviewed articles and reports, providing insights into their quality and reliability. This analysis will contribute to a comprehensive understanding of the current state of research on AI in agriculture and guide further exploration and adoption of AI technologies in the field.

Social Media Effect on Mental Health

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ABSTRACT

This paper investigates how social media affects people's mental well-being, focusing on four age categories ranging from teenagers to middle-aged individuals. To gather data, we employed a combination of surveys and a limited analysis of relevant literature and academic articles. Notably, our study reveals distinct differences in the influence and consequences of social media between teenagers and young adults, with teenagers being particularly vulnerable. This paper provides a comprehensive overview of the topic, highlighting the need for further detailed investigations, especially in societies with a youthful demographic like Kurdistan. By shedding light on the complex relationship between social media use and mental health across different age groups, our research contributes to the existing body of knowledge. The findings aim to inform future interventions and policies aimed at addressing the potential impact of social media on mental well-being

The Impact of Social Media on Students Life

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ABSTRACT

This paper explores the impact of social media on students' lives, focusing on how unlimited screen time and social media usage can have consequences in their daily routines. A survey was conducted using Google Forms to gather insights on students' social media habits, GPA, and personal opinions regarding the effects of social media on their lives and self-perception. The findings revealed that more than half of the participants believed that social media negatively affected their ability to concentrate on their studies. Additionally, a significant number of students reported that social media altered their perception of reality. These negative impacts were linked to consequences such as sleep deprivation and lower academic performance.

Certificate of Accreditation

Upon application by the

Tishk International University

the Commission of the **Central Evaluation and Accreditation Agency Hannover (ZEvA)** has accredited the following Bachelor's programme:

Information Technology

The accreditation is valid until 30 September 2024.

Hanover, 18 March 2019

Prof. Dr. Wolfgang Lücke
Academic Director ZEvA

Henning Schäfer
Managing Director ZEvA

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