

Research Activities Booklet

Academic Year 2023 - 2024

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النجاح يبدأ بل Success starts with you

Contents

Head of Research Unit's Message	4
Research Strategy	5
Research Initiatives	5
Introduction	5
Research Activities Highlights	6
Research Seminars by Faculty Members	6
Research Seminars by Distinguished Guest Speakers	6
Students Scientific Day (Student Research and Senior Design Project Exhibition) \dots	6
Conferences	6
Winners of the Internal Research Grants for 2023-2024 Cycle	7
Support Research Activities	7
Research Activities	8
2023 – 2024 Calendar	8
Research Seminars	10
Winners of the Internal Research Grants for 2023-2024 Cycle	22



Head of **Research Unit's** Message

Welcome on behalf of myself and the Liwa College community.

You are about to take a very important step - entering the stage of your life where the possibilities are endless. By registering for a program of study at LC, you will start your transformation journey to becoming a next generation thinker, a business leader, an entrepreneur.

At LC, our students are our first and primary focus. Everything we do is informed by our desire to develop each one of you into creative, confident, adaptable, and ethically strong individuals who can face challenges head-on and succeed at whatever you put your mind to. Our alumni have built successful careers in



Dr. Ahmad Abu Abdo Acting Head of Research Unit Liwa College

leading public and private organizations, and our priority is to watch you follow in their footsteps.

My promise to you is that our faculty and staff – leading academics, expert practitioners, and international researchers – will be with you every step of your LC journey, supporting your success. I extend a personal invitation to take a tour of our campus and speak to our team, and I look forward to welcoming you soon.





Research Strategy

Liwa College prioritizes applied research that addresses real-world challenges and benefits industry, society, and the economy, in alignment with UAE national objectives. Our collaborations with industry partners enable us to implement an applied research program that develops practical solutions to current and future challenges.

Research Initiatives



Develop a research strategy at the institutional and academic departmental levels.



Enhance research productivity by increasing the number of research papers and publications produced.



Drive collaborations and projects with industry and academic partners for research activities.



Facilitate faculty and student participation in conferences and research competitions.



Establish an applied research program that fosters the development of practical solutions addressing real-world problems.



Develop student research skills and cooperate with ADU's annual Undergraduate Research Competition.

Introduction

Liwa College recognized that research activities are an essential part of its mission and the educational process. By enhancing the quality of research activities conducted by its faculty members and students and providing support to such activities, the college and its constituents will greatly benefit, and it will improve its ranking and visibility among other institutions in the region. Therefore, the college has developed initiatives to support research activities and will organize research events during the academic year as described in this booklet.





Research Activities Highlights

Research Seminars by Faculty Members

In efforts to promote research and collaboration among the college faculty members, a total of twelve research seminars presented by faculty members from all faculties will be conducted during the academic year. These seminars will give faculty members the opportunity to present their research work to colleagues and get valuable insights and feedback that may add value to their work.

Research Seminars by Distinguished Guest Speakers

Five prominent and distinguished researchers will be invited to present their research work and findings to faculty members. The guest speakers' backgrounds will cover the five different fields presented by the five faculties at the college. By exposing our faculty members to the recent advances and research studies in their field, it is expected to generate new ideas and venues for research studies conducted at the college by its faculty members.

Students Scientific Day (Student Research and Senior Design Project Exhibition)

At the end of the Fall and Sprong semesters, a Students Scientific Day will be organized, at which students will have the chance to present their research and senior design projects to a diverse audience and their follow students. Thus, enhancing their communications skills. This event will be attended by faculty members and students, which may lead to discussion and sharing ideas that will add to our students' knowledge.

Conferences

Two conferences will be organized by the college:

- 9th edition of the international conference of Optimization and Applications ICOA2023. Organized by the Faculty of Engineering
- second scientific conference, entitled: Applications of Artificial Intelligence in the Media Field: Opportunities and Challenges. Organized by Faculty of Media and Public Relations



Winners of the Internal Research Grants for 2023–2024 Cycle

The Internal Research Grants for 2023-2024 Cycle have been announced with ten projects from all faculties have been awarded AED 855,000. These projects cover a wide range of fields including IT, engineering, health sciences, media, and business. Most of these projects are aligned with the UAE National Strategy for Innovation.

Support Research Activities

The college has increased its support to research activities by:

- Increasing the conference travel fund budget to AED 20,000 for all faculty members, with up to four conferences per academic year.
- Matching awarded external fund up to 50% for any faculty member who obtain external funds as a principal investigator (up to AED60,000 per year for maximum of two years).
- Providing funding opportunities for student research projects by providing students with access to resources and necessary equipment. In addition, pending availability of funds and upon the Vice President of Academic Affairs (VPAA) approval, the College is willing to fund conferences registration and travel expenses to students presenting at conferences or research exhibitions (typically) along with their research project supervisors.
- Considering the reduction of the following-year teaching load by three credit hours for any faculty member who manages to publish in one academic year, as a sole/first author, a minimum three articles in peer-reviewed journals ranked as Q1 in Scopus with Thomson Reuters Impact Factor, pending the teaching needs of the department and approval of VPAA.
- Willing to support faculty members who are invited to participate as guest / keynote speakers or to present their work at research seminars. The VPAA may approve the support of such scholarly activities if the participant is able to demonstrate that such activity has added value to the scientific community, increase the visibility of the College, help to build/ extend the faculty member's scientific network, or potentially forge collaborations with external academics. Furthermore, the VPAA may approve funding the participation of a faculty member representing the College at an international accreditation body annual meeting / workshop.
- Supporting other research expenses. These may include research labs, equipment, software, databases, publication editing services,, etc, depending on the availability of research funds and the recommendation of the VPAA.



Research Activities 2023 – 2024 Calendar

Period	Events				
25/09/2023	Call for Internal Research Grant Project Application 2024- 2025 Cycle				
29/09/2023	Prophet Mohammad's Birthday*				
05/10/2023 - 06/10/2023	9th edition of the international conference of Optimiza- tion and Applications ICOA2023 – Faculty of Engineering				
13/10/2023	New Faculty Members Research Orientation				
13/10/2023	Research Seminar 1 E-tourism: new communication challenges for the travel agencies in the UAE Dr. Anis Bachta – Faculty of Business				
16/10/2023 – 25/10/2023	Midterm exams period				
20/10/2023	Research Seminar 2 5G-OPS: Optimizer of Private 5G Slices Dr. Rasha Hasan – Faculty of Information Technology				
27/10/2023	Guest Speaker #1 Research Seminar				
03/11/2023	Research Seminar 3 Metaverse Technology in Health and Family: Assessing Im- pacts, Identifying Guidelines, and Examining Perceptions Dr. Ray Al-Barazie – Faculty of Medical and Health Sciences				
17/11/2023	Research Seminar 4 Overview of innovative laboratory solution to Colorectal and Oesophagi polyps' smart detection and cure Dr. Amit Swamy – Faculty of Engineering				
24/11/2023	Guest Speaker #2 Research Seminar				
01/12/2023 - 03/12/2023	Martyrs & National Day				
08/12/2023	Students Scientific Day (Student Research and Senior De- sign Project Exhibition)				
15/12/2023 – 23/12/2023	Final Exams period				
26/12/2023 - 31/12/2023	Fall Break (Faculty)				
01/01/2024	New Year Holiday				
02/01/2024	First Day of Classes (Spring Semester)				
05/01/2024 – 06/01/2024	Fall Semester Incomplete Exams				
19/1/2024	New Faculty Members Research Orientation				
19/1/2024	Research Seminar 5 Metaverse and Virtual Environment to improve attention deficit hyperactivity disorder (ADHD) students' learning Dr. Azza Basiouni – Faculty of Information Technology				
26/01/2024	Research Seminar 6 الممارسة المهنية للعلاقات العامة وعلاقتها بالتأهيل الأكاديمي Prof. Abdul-Malek Al-Danani – Faculty of Media and Public Relation				





Period	Events			
02/02/2024	Guest Speaker #3 Research Seminar			
09/02/2024	Research Seminar 7 Synchronous Fluorescence Spectroscopy for Diagnosis of Oral Submucous Fibrosis Dr. Fathi Hassan – Faculty of Medical and Health Science			
12/2/2024 – 21/2/2024	Midterm exams period			
23/02/2024	Research Seminar 8 Metaverse Adoption: A Driving Force for Sustainable Healthcare in the Industry 5.0 Era Dr. Nazia Shehzad – Faculty of Business			
01/03/2024	Research Seminar 9 الوسائط المرئية في تطبيقات وسائل التواصل الاجتماعي: دراسة تفضيلات الوصول إلى المعلومات لطلبة الجامعات الإماراتية Visual Media in Social Media Applications: A Study of the Information Access Preferences of Emirati University Stu- dents Dr. Maeen Al-Mitamy – Faculty of Media and Public Rela- tion			
08/03/2024	Guest Speaker #4 Research Seminar			
11/3/2024*	1st day of Ramadan			
15/03/2024	Research Seminar 10 Machine Learning for sustainable Supply Chain Manage- ment Dr. Zoubida Benmamoun – Faculty of Engineering			
29/03/2024	Research Seminar 11 Tweets' Features and Reactions: Exploring Higher Educa- tion Institutions Activities in Abu Dhabi Dr. Imen Gharbi – Faculty of Business			
01/04/2024 - 14/04/2024	Spring Break			
05/04/2024	Guest Speaker #5 Research Seminar			
08/04/2024 - 12/04/2024	Eid El Fitr Holiday*			
19/04/2023	Students Scientific Day (Student Research and Senior De- sign Project Exhibition)			
25/04/2024	Deadline for Internal Research Grant Proposal Applications			
26/04/2024 - 04/05/2024	Final Exams period			
10/05/2024	Research Seminar 12 The importance and trends of Digital Economy during COVID 19 crisis: UAE case Dr. Myriam Aloulou – Faculty of Business			
10/06/2024 – 11/06/2024	المؤتمر العلمي الثاني تحت عنوان: تطبيقات الذكاء الاصطناعي في المجال الإعلامي: الفرص والتحديات – كلية الإعلام والعلاقات العامة			

*Public Holiday - dates are subject to change.



Research Seminars:

No.1

E-tourism: new communication challenges for the travel agencies in the UAE

Abstract:

Certainly, the development of electronic commerce is beneficial for both the producer and the consumer. However, the problem posed by the development of e-commerce generally resides in the fact that the development of Internet technology has profoundly modified the tourism distribution chain. In other words, the role of traditional distributors, tour operators and travel agencies, tends to weaken and will even be canceled out as long as they do not find a new niche or a new communication strategy both with its customers and with its economic partners.



Dr. Anis Bachta

Department of Management Faculty of Business

Biography:

Dr. Anis Bachta received his Doctoral degree in Management Sciences from the University of Tunis, Tunisia. Dr. Anis's research focuses on the digital divides inside the organizations, their conceptualization, and the development of a measurement scale. His articles are published in peer reviewed international journals including, Cambridge Scholar Publishing, the Euro-Mediterranean journal of Economics and Finance Review, Springer, etc.

5G-OPS: Optimizer of Private 5G Slices Abstract:

Private 5G networks (5 Generation Networks) are designed to handle demanding applications such as virtual and augmented reality, the IoT (Internet of Things), high-definition video, drones, and other applications that require low latency, high speed, and high capacity. However, the challenge lies in the fact that each of these applications has unique requirements. To meet the application-required private 5G network slicing must be optimized to support different types of applications. In this paper, 5G-OPS (Optimizer of Private 5G Slices), a network slicing optimizer for private 5G, is proposed to allow enterprises effectively use a portion of the network resource to split to serve various applications based on the requirements that vary and differ from one application to another. 5G-OPS assumes a physical network called Substrate Network (SN) includes nodes and links to provide latency, reliability, bandwidth, and processing constraints. In 5G-OPS, different applications are viewed as virtual networks mapped on the SN. In our work, we do not discuss the design of the resource, rather, we focus on the resource allocation problem to provide suitable end-to-end services. A mathematical allocation model is used for G-group application in the shape of a Mixed Integer Program (MIP). After applying the mathematical model, physical resources that need to provide latency or security constraints are decided in an economic manner (i.e., the minimum enough to answer applications' requirements), and the Virtual Networks' nodes and links are mapped based on the decided SN. Every virtual node and link is mapped to physical node and link/path in accordance with the virtual nodes and links requests in terms of CPU, bandwidth, latency and Security.



Dr. Rasha Hasan

Department of Information Technology Faculty of Information Technology

Biography:

Dr. Rasha Hasan obtained her PhD in Computer Science from PUCRS (Pontifícia Universidade Católica do Rio Grande do Sul) university in Brazil, her Master degree in Networking and Systems from INSA institute in France (Institute National des Sciences Appliquées), and her BSc degree from Damascus University on Electrical Engineering . Dr. Rasha worked as a researcher in LAAS-CNRS laboratory in France (Laboratoire d'Analyse et d'Architecture des Systèmes-Centre National de la Recherche Scientifique), and earlier as a Networking Engineer in the Public Data Center in Damascus. Dr. Rasha has almost 7 years working experience between industry and academy. Dr. Rasha speaks fluently five languages, and her main research interests are: Internet of Things, Networking, and Optimization.

Metaverse Technology in Health and Family: Assessing Impacts, Identifying Guidelines, and Examining Perceptions

Abstract:

Metaverse technology has shown promising impacts on various fields, including the health and medical industry. While its impact on mental health is well established, its effects on physical health and family relationships require further investigation. Therefore, this paper aims to study the impact of metaverse technology on diverse parameters and propose guidelines for appropriate and safe use. The study analyzes data from the literature and uses data collected from the survey sent to metaverse technology users to determine the advantages, limitations, and usage guidelines of metaverse technology in fields related to health, medical sciences, and family dynamics.

The results of the study identified potential uses and limitations of metaverse technology in health and medical fields. Furthermore, this study could contribute to the development of guidelines for the safe and responsible use of metaverse technology to optimize its benefits while minimizing its risks. Furthermore, the study investigated the impact of metaverse technology on family relationships which were perceived differently by the population as some believe it supports family relationships and interactions while others think it weakens it. In conclusion, the study provides valuable insights into the effects of metaverse technology and suggests future research avenues to enhance its positive impact.



Dr. Ray Al-Barazie

Department of Allied Health Professions Faculty of Medical and Health Sciences

Biography:

Dr. Ray obtained her PhD in Biomedical Sciences from United Arab Emirates University. She has 10 years of extensive experience in academic and admin positions in Higher Education Institutions and Pharmaceutical field in UAE. Research interests include pharmacological modulation of immune response to infectious disease, metaverse technology impact on medical field and others.

Overview of innovative laboratory solution to Colorectal and Oesophagi polyps' smart detection and cure

Abstract:

The technological revolution and advanced social outreach have altered our pattern of conduct. Human evolution has adapted towards its new lifestyle, that has changed our pattern of eating. Thus, resulting in digestive disorders disturbing with a common feeling of "heartburn or (GERD) Gastroesophageal reflux diseases". However, the diagnostic and testing involve esophagogastroduodenoscopy or colorectal-endoscopy with finite experience and judgement of the consultant.

Thus, the aim of this research is to design, develop and implement a laboratory solution for (upper and lower) GI healthcare problems that will be related to detection and diagnostic of region of interest and finally predicting the behaviour for a test specimen using integrated technologies.

The validation of the laboratory solution can be concluded with computational modelling and various prediction models. Several detections, classification diagnosis, segmentation, and prediction AI models with different behaviours to simulate various clinical conditions are utilized for training purposes. In addition, stents with different bradding patterns have been designed for cure purposes.



Dr. Amit Swamy

Department of Mechanical and Industrial Engineering Faculty of Engineering

Biography:

Dr. Amit's research entails using artificial intelligence (AI) that has been established using novel mechanical engineering, creativity, and nature- inspired approaches to solve engineering and medical problems. His passion and commitment have been recognized through his meritorious work, which is shown by the accolades, prizes, patents, books, and citations he has earned.

Metaverse and Virtual Environment to improve attention deficit hyperactivity disorder (ADHD) students' learning

Abstract:

In recent years, educators in information technology departments and teachers caring for students with disabilities, such as autism and attention deficit hyperactivity disorder, have worked together to create a more inclusive environment for students with disabilities, and have focused their attention on the Metaverse. Mark Zuckerberg, a notable business magnate, recently stated that Facebook will be rebranded as Meta and will have its own virtual world, also known as the Metaverse. As a result, interest in the Metaverse has grown considerably. Although educators may be aware of the Metaverse as a concept, its potential cannot be dismissed once it has been deployed. As the existence of the Metaverse is still in its infancy, it is crucial to develop a comprehensive understanding of its benefits, applications, and effects on the education system once it becomes an official part of the education experience in the current world. This article aims to shed light on how the Metaverse will transform education and help students suffering from diseases such as ADHD and an autism spectrum disorder.



Dr. Azza Basiouni

Department of Information Technology Faculty of Information Technology

Biography:

Dr. Azza Mohammed is an assistant professor in the Faculty of IT's Information Technology Department. She has over fifteen years of experience in higher education, and research. Dr. Azza holds a Ph.D. and master's degree in computer engineering, as well as a bachelor's degree in electrical engineering (Communication).

الممارسة المهنية للعلاقات العامة وعلاقتها بالتأهيل الأكاديمي

الملخص:

تقديم محاضرة مفصلة عن مسيرة مشروعنا البحثي للأعوام 2023-2021 - (-IRG MPR-002-2021)، وما تخلله المشروع من أنشطه علمية وفعاليات.

حيث تم تقسيم مشروعنا البحثي إلى أربعة أجزاء لكل جزءً منه مجالاته العلمية، وعلى النحو الآتي:

- تنفيذ دراستين لكل دراسة معطياتها، الدراسة الأولي بعنوان: استخدامات الذكاء الاصطناعي في العلاقات العامة، وقد نشرت في المجلة العربية لعلوم الاتصال، الصادرة عن جامعة سعود، وهي مجلة علمية محكمة ذات معامل تأثير، وإرسال الدراسة الثانية للنشر.
 - المشاركة في ثلاثة مؤتمرات علمية، في الجامعة الخليجية بمملكة البحرين، ومعهد علوم الاخبار والصحافة في تونس، فضلاً عن المشاركة في المؤتمر العلمي الثاني لبناء مجتمع المعرفة والمواطنة العربية، الذي نظمة المعهد العالمي للتجديد العربي في تونس.
- تنظيم المؤتمر العلمي الدولي الأول للعلاقات العامة في الكلية تحت عنوان: التأهيل
 الأكاديمي والممارسة المهنية للعلاقات العامة في الدول العربية: الواقع والآفاق، خلال المدة من 20 إلى 21 مارس 2023، بمشاركة عربية واسعة.
- الانتهاء من جمع وتصحيح المادة العلمية لإصدار كتاب علمي يتضمن الدراسات المشاركة في المؤتمر العلمي الدولي الأول للعلاقات العامة، والتي اجازتها لجنة المؤتمر للنشر في الكتاب، وتتوفر فيها شروط ومعايير النشر العلمي.



بروفيسور عبدالملك الدناني

قسم العلاقات العامة كلية الإعلام والعلاقات العامة

السيرة الذاتية:

- الأستاذ الدكتور/ عبد الملك الدناني أستاذ في قسم العلاقات العامة والإعلان بكلية ليوا منذ عام 2013.
 - استاذ زائر بجامعة عجمان الإمارات للعام الدراسي
 2010-2011. رئيس قسم العلاقات العامة بجامعة
 الجزيرة، في دبي 2013-2011. رئيس قسم في
 جامعة صنعاء للمدة 2008-2008.
 - عمل في العديد من وسائل الإعلام اليمنية قبل الالتحاق بمهنة التدريس، منها صحيفة الجمهورية اليمنية.
 - حصل على جائزة البحوث المشاركة في المؤتمر الدولي لأساتذة الاتصال AUSACE، بجامعة قطر عام 2015.
- رئيس تحرير مجلة بحوث العلمية المحكمة، الصادرة عن مركز لندن للبحوث منذ عام 2018.

Synchronous Fluorescence Spectroscopy for Diagnosis of Oral Submucous Fibrosis

Abstract:

Synchronous Fluorescence Spectroscopy (SFS) was studied for diagnosis of Oral Submucous Fibrosis (OSF). Consenting volunteers with no habit of smoking or alcohol consumption were grouped as control group. Patients with OSF who were reported in Tamilnadu Government Dental College and Meenakshi Ammal Dental College in Chennai were included for in vivo studies. Synchronous Fluorescence (SF) spectroscopic characterizations were carried out using spectrofluorometer coupled with optical fiber. The results showed that spectral changes are attributed to tryptophan, collagen and NADH. Statistical analysis reveals that, normal subjects are discriminated from OSF with 100% sensitivity and 95% specificity.



Dr. Fathi Hassan

Department of Allied Health Professions Faculty of Medical and Health Sciences

Biography:

Dr. Fathi's diverse research interests include Radiation protection & Dosimetry, Radiobiology, Nanotechnology, Photodiagnosis & Photodynamic Therapy. Dr. Fathi worked at the Red Sea University (Sudan) 2003 - 2018 and a visiting scientist at Friedrich-Schiller-Universität Jena (Germany) 2017.

Metaverse Adoption: A Driving Force for Sustainable Healthcare in the Industry 5.0 Era

Abstract:

There are many potentials to enhance sustainable performance in healthcare with the advent of Industry 5.0 technology. In this study, the relationship between Industry 5.0 technologies and the improvement of sustainable performance in the healthcare industry is examined. The metaverse, a virtual reality environment where users may interact with other users and digital worlds, uses cutting-edge technology like artificial intelligence, blockchain, and the Internet of Things to provide innovative solutions to challenges in healthcare. This study looks into the possible advantages of adopting the metaverse in healthcare, with a particular emphasis on how it might help with the shift from Industry 4.0 to Industry 5.0. While Industry 4.0 created the groundwork for digitization, automation, and connection, Industry 5.0 places a stronger emphasis on integrating people and machines to promote sustainability and collaboration. By bridging the gap between the virtual and real worlds, the immersive and participatory qualities of the metaverse can hasten this shift. Healthcare organizations can use Industry 5.0 technology to improve sustainable performance in a number of ways by embracing the metaverse. But, for Industry 5.0 technologies and the metaverse to be successfully applied in healthcare, careful consideration of adoption factors is required. According to this study, the adoption of the metaverse can operate as a moderator in the interaction between Industry 5.0 technologies and sustainable performance results. This study contributes to our understanding of the transformative potential of emerging technologies by exploring the interactions between industry 5.0 technologies, metaverse adoption, and sustainable performance in healthcare.



Dr. Nazia Shehzad

Department of Human Resource Management Faculty of Business

Biography:

With versatile academic and industrial experience of more than 17 years, Dr. Nazia is an Assistant Professor in Liwa College, Abu Dhabi. Dr. Nazia has both national and international conferences to her credit. She is also the recipient of research grants from funding agencies that include the Office of Research and Sponsored Programs at Abu Dhabi University and Faculty Research Incentive Grant at Liwa College. Dr. Nazia has published her work in International Refereed Journals.



الوسائط المرئية في تطبيقات وسائل التواصل الاجتماعي: دراسة تفضيلات الوصول إلى المعلومات لطلبة الجامعات الإماراتية Visual Media in Social Media Applications: A Study of the Information Access Preferences of Emirati University Students

الملخص:

إن الهدف الرئيس لهذه الدراسة هو التعرف على تبني مستخدمي مواقع التواصل الاجتماعي والإنترنت لمقاطع الفيديو للوصول إلى المعلومات من خلال تطبيقات الإنترنت والأجهزة الذكية. طرحنا بعض الأسئلة التي تحتاج إلى إجابات حول هذا التبني وما التطبيقات الأكثر تبني أ؟ وأسباب هذا التبني؟ وآليات وعادات التبني ؟؛ حيث تتمثل المشكلة البحثية في أن هناك تبني واضح لبعض التطبيقات دون الأخرى لدى الطلبة وبنسب متفاوتة مما يتيح لهم مجموعة خيارات متعددة للوصول إلى المعلومات على قدر الإمكانات التقنية لكل تطبيق. تحاول هذه الدراسة الإجابة على السؤال التالي: كيف يفسر الطلبة تبنيهم وقبولهم استخدام مقاطع الفيديو عبر شبكة الإنترنت؟ وذلك للوصول إلى استكشاف فاعلية هذه التطبيقات من



Biography:

Dr. Maeen Al-Maitamy has been an Associate Professor within the Media and Public Relations Department at Liwa College since 2020 and an Assistant Professor specializing in higher education since 2012. He has acquired extensive expertise spanning diverse domains, including instructional methodologies and the effective oversight of faculty cohorts. He has assumed various scholarly roles, including leadership of the department, acting as Deputy Dean, and presently serving as rapporteur for the College of Mass Communication and actively participating in the college's advisory council.



Machine Learning for sustainable Supply Chain Management

Abstract:

The use of Machine learning process is considered an approach used as a decision-making support for improving operations and processes in manufacturing. The application of Machine Learning requires a combination of expertise on Industry process and data science. The improvement approach for sustainable Supply Chain Optimization using a machine learning model is required in research area. This research develops and discusses a generalized model for evaluating wastes and developing strategies to increase the profitability of a business, to demonstrate the maximizing of tradeoff capacity against organizational performance.

The major goal is to find the uses of machine learning (ML), one of the most well-known artificial intelligences (AI) techniques, for sustainable SCM. By developing a conceptual framework, selecting and segmenting suppliers, predicting supply chain risks, and estimating demand and sales, production, inventory management, transportation and distribution, sustainable development (SD), and circular economy (CE).



Dr. Zoubida Benmamoun

Department of Mechanical and Industrial Engineering Faculty of Engineering

Biography:

Dr. Zoubida Benmamoun, assistant professor at Liwa College since fall 2021. With 8 years of experience in academia and 8 years of experience as Supply Chain Manger at multiple aerospace industry working such as Boeing.

Tweets' Features and Reactions: Exploring Higher Education Institutions Activities in Abu Dhabi

Abstract:

The aim of this study is to explore how Higher Education Institutions (HEIs) utilize Twitter in Abu Dhabi. The study assessed the importance of using some tweet features such as media, language, Hashtag, links and mentions to foster audience reaction. The paper analyzed 6558 tweets posted by 16 HEIs operating in Abu Dhabi. Results suggest that tweets in Arabic, tweets containing videos, links or mentions generate more reactions in terms of likes, retweet and replies, whereas tweets containing Hashtags generate less reactions. This study sheds light on the importance of tweets' features and provides direction on how HEIs can effectively utilize social media to enhance user engagement.



Dr. Imen Gharbi

Department of Management Faculty of Business

Biography:

Before her current role at Liwa College, Dr. Imen served as an Assistant Professor at Liwa College of Technology since 2015. She holds a PhD in Management Sciences, along with master's and bachelor's degrees in finance from the Higher Institute of Management of Tunis- ISG, where she also worked as an Assistant Professor. Dr. Imen gained practical experience in Tunisia as a financial analyst in a brokerage house and as a business consultant in product management. Her research interests currently revolve around social media and higher education, while her doctoral research primarily focused on corporate governance and managerial entrenchment.

The importance and trends of Digital Economy during COVID 19 crisis: UAE case

Abstract:

The digital economy is a key driver of economic development that has profoundly altered the public's way of life. Technology has played an important role in our well-being, and it is likely to present more opportunities in the future, particularly during the COVID-19 pandemic. As the "Internet of Things," artificial intelligence (AI), virtual reality, blockchain, self-driving cars, and other technologies advance, the digital economy will become more important. It offers some advantages like information through reviews, forums that help making decision about goods and services, security through online payment and global presence since the product or service is available anytime and anywhere. The goal of this study is to showcase the importance, challenges and trends of digital economy and its impact on the economic development and employment during Covid19 crisis in the UAE. The study also explores how innovations can improve people's quality of life around the globe and how technology and digitalization can be used to create prosperous smart economies in the post-pandemic period.



Dr. Myriam Aloulou

Department of Accounting and Finance Faculty of Business

Biography:

Over 16 years as a business faculty with industry exposure and rich experience in teaching, training and research in economics and finance fields. Dr. Mariem is FinTech certified from Harvard office of VP advanced learning. Prior joining Liwa College, she worked as an Assistant Professor in the Higher Management Institute, Tunisia.

Winners of the Internal Research Grants for 2023–2024 Cycle

The winners of the Internal Research Grant for the 2023-2024 cycle have been announced. Ten projects from all five faculties have been awarded with a total of amount of AED 855,000. These projects cover a wide range of fields including IT, engineering, health sciences, media, and business with a duration of one to tow years. Most of these projects are aligned with the UAE National Strategy for Innovation. The winning projects are listed in the table below.

Faculty	PI	Project Title	Grant Fund Number	Budget	Duration
Business	Dr. Khaoula Khlie	Generative AI for enhanced Operations and supply chain management	IRG- BIT-001-2023	AED60,000	2023-2024 Academic Year
Business	Dr. Hayet Ben Hamida	The incorporation of the triple bottom line (TBL) into the decision-making processes of financial institution (Fintech) for a more responsible investment and sustainable business: the case of MENA region with focus on UAE	IRG- BIT-002-2023	AED60,000	2023-2024 Academic Year
Business	Dr. Myriam Aloulou	Towards Global sustainability, Net Zero targets: Investigating the impact on economic Growth in GCC countries.	IRG- BIT-003-2023	AED100,000	2023-2025 Academic Years
Engineering	Dr. Amin Almasri	Optimizing Window- to-Wall ratio for better cooling energy consumption and occupants comfort in UAE climate.	IRG- ENG-001-2023	AED60,000	2023-2024 Academic Year



Winners of the Internal Research Grants for 2023–2024 Cycle



Faculty	PI	Project Title	Grant Fund Number	Budget	Duration
Engineering	Dr. Mahmoud Z. Mistarihi	Design and Analysis of Future Sustainable Green Energy Technologies: Photovoltaic Systems and Wind Turbines	IRG- ENG-002-2023	AED120,000	2023-2025 Academic Years
Information Technology	Dr. Azza Basiouni	AR, VR, and Al- Driven Metaverse for Personalized and Inclusive Learning: Empowering Special Needs Children in the UAE	IRG- IT-001-2023	AED120,000	2023-2025 Academic Years
Information Technology	Prof. Santosh Ray	Educational Recommender System for Enhancing Student's performance, learning outcome and satisfaction	IRG- IT-002-2023	AED110,000	2023-2025 Academic Years
Medical and Health Sciences	Dr. Hussam Ali Osman	Use of a Local Endemic Isolate of Trypanosoma evansi in a direct agglutination test for the Diagnosis and Prevention of Al Zanpour in the United Arab Emirates	IRG- MHS-001-2023	AED120,000	2023-2025 Academic Years
Media and Public Relations	Prof. Abdul- Malek Radman Al- Danani	توظيف تقنيات الذكاء الاصطناعي في مجال الإعلام بالدول العربية (أكاديمياً ومهنياً)	IRG- MPR-001-2023	AED60,000	2023-2025 Academic Years
Media and Public Relations	Dr. Mohamed Rashad	Consumer Acceptance and use of News App Push Notifications: The Influence of Frequency and style	IRG- MPR-002-2023	AED45,000	2023-2024 Academic Year





Research Activities Booklet

Academic Year 2023 - 2024

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