

Proceedings
of
**7th International Conference
on Recent Trends in
Computer Science and
Electronics**

January 5-7, 2022

**Room 105, University of Hawaii, Manoa
2520 Correa Road, IT Center Honolulu,
Hawaii, USA**

Proceeding Editors:

Doris Esenarro, Yousef A. El-Ebiary, Bishwajeet
Pandey, Sonal Sharma, Jason Levy,

About RTCSE'2022

7th International Conference on Recent Trends in Computer Science and Electronics

January 5-7, 2022

Room 105, University of Hawaii (Manoa Campus), Manoa 2520 Correa Road, IT Center Honolulu, Hawaii, USA, Satellite Session : The Oxford College of Engineering, Bangalore India
 E-mail : gyancity@gyancity.com, jlevy@hawaii.edu, website : <https://rtcse.org>

ABOUT US

The 7th Annual International Conference on Recent Trends in Computer Science and Electronics (RTCSE® 2022) will be held from January 5th (Wednesday) to January 7th (Friday) at Room 105, University of Hawaii (Manoa Campus), Manoa 2520 Correa Road, IT Center Honolulu in Honolulu, Hawaii on the island of Oahu ("the gathering place"), home to about two-thirds of the population of the U.S. state of Hawaii. The 2022 International Conference on Recent Trends in Computer Science and Electronics (RTCSE® 2022) will once again serve as a key gathering place for academicians and professionals from Computer Science, Engineering, Mathematics and related fields to come together and learn from each other. An additional goal of the conference is to provide a place for academicians and professionals from around the world with cross-disciplinary interests related to these topics to meet and interact with members inside and outside their own particular disciplines. The 2016, 2017, 2018, 2019, 2020 and 2021 conference was a great success! It was attended by more than 200 participants representing more than 32 countries! See more information about previous RTCSE conferences. Gyancity Research Lab organize 4 conferences (ICGCET.ORG, RTCSE.ORG, IMCES.TECH, BMESS.GYANCITY.COM) across the globe. This RTCSE® conference is a sister conference of BMESS®, IMCES® and ICGCET®. ICGCET® was organized in Dubai, Denmark, Ireland, Denmark, Morocco, Russia and Peru in 2015, 2016, 2017, 2018, 2019, 2020 and 2021 respectively. ICGCET®'2022, ICGCET®'2023 will in Mauritius and Cape Town (South Africa). RTCSE®'16 and RTCSE®'17 conference were in Malaysia. RTCSE®'18 was in Thailand. RTCSE®'19, RTCSE®'20, RTCSE®'21 were in the USA. RTCSE®'22 and RTCSE®'23 will in USA. IMCES® was organized in Malaysia, Mauritius, Indonesia and Indonesia in 2017, 2019, 2020 and 2021 respectively. IMCES®'2022, IMCES®'2023 will in Denmark and Vietnam respectively. BMESS®'2021 was Virtual. BMESS®'2022 and BMESS®'2023 will in Dubai, and Hong Kong respectively. IMCES®, BMESS and ICGCET® publish in Scopus/Web of Science index Journal.

OUR PLATINUM SPONSORS



ALL ACCEPTED PAPERS WILL BE PUBLISHED IN ONE OF THE FOLLOWING INDEX JOURNALS

- ISI WEB OF SCIENCE/ESCI: 3C TECNOLOGIA, ISSN: 2254-4143, E-ISSN: 2254-4143
- ISI WEB OF SCIENCE/ESCI: 3C EMPRESA, ISSN: 2254-3376, E-ISSN: 2254-3376
- ISI WEB OF SCIENCE/ESCI: 3C TIC, ISSN: 2254-6529
- ISI WEB OF SCIENCE/ESCI: VB INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL
- SCOPUS: MATERIALS TODAY: PROCEEDINGS, ISSN: 2214-7853
- SCOPUS: NATURAL VOLATILES AND ESSENTIAL OILS
- SCOPUS: REVIEW OF INTERNATIONAL GEOGRAPHICAL EDUCATION ONLINE
- ISI WEB OF SCIENCE/ESCI: DRUGS AND CELL THERAPIES IN HEMATOLOGY
- SCOPUS: AIP CONFERENCE PROCEEDINGS

PUBLISHER, INDEXING PARTNER, AND TECHNICAL CO-SPONSOR



Chair Message

As a chair, we have the honor to welcome you with great respect and enthusiasm to the 7th International Conference on Recent Trends in Computer Science and Electronics Engineering (RTCSE'2022) to be held at the University of Hawaii, USA on 05-07 January 2022 (both ONLINE and OFFLINE). RTCSE'2022 intended to attract innovative technical and scientific work in the field of computer science and electronics engineering. The response to the conference was overwhelming and we are proud to state that we have received really good quality contributions and we are sure as an online/offline participant you will share the same sentiment. All accepted papers will be submitted to Scopus/Thomson Reuters/Web of Science/ESCI Index Journals (see list on conference website) and hopefully these papers will be available online by middle of 2022.

As a chair and on behalf of the organizing committee, we are extremely sorry that RTCSE'2022 will unable to host few of you at Hawaii. And as an online participant, you are unable to visit Hawaii from different parts of the world to share and contribute in the areas of their expertise. We hope to provide a good virtual platform to the participants of RTCSE'2022 where not only they meet and share their vision, ideas but also fertilize their thoughts in the ever-growing area of computer science and electronics engineering technologies. We are also confident that our keynote speakers will be able to enrich your knowledge during the conference and we wish you a very safe stay at your home country.

It is the 19th conference hosted by Gyancity Research Lab, next two in 2022 are following:
International Conference On Business, Management, Environmental, and Social Science (BMESS)
30-31 March 2022

Bath Spa University UK, Academic Centre Rak Al Khaimah, United Arab Emirates
<https://bmess.gyancity.com>

International Multi-Topic Conference on Engineering and Science (IMCES)
29-30 June 2022
Department of Energy Technology, Aalborg University, Esbjerg, Denmark
<https://imces.tech/>

Best wishes.

Prof Jason Levy, University of Hawaii, USA

Dr Bishwajeet Pandey, Jain University, Bangalore, India

Tel: +1-808-689-2492, Whatsapp: +91-7428640820

Email: rtcse@gyancity.com, jlevy@hawaii.edu, dr.pandey@ieee.org

RTCSE'2022 Schedule

5th January 2022

Video Presentation:

Available 24x7 on YouTube Channel of Gyancity Research Lab:

<https://www.youtube.com/channel/UCHtdIuXBlevhmQb3zQ82uCA>

Session 1:

Paper Id: 1, 13, 15, 29, 30, 32, 33, 35, 36, 37, 49, 50, 78, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 116

09:15-11:50 (Indian Time 6th January) (Hawaii Time 17:45-20:20 5th January)

Satellite Sessions @ Oxford College of Engineering, India

Satellite Session 2:

Paper Id: 16, 28, 43, 47, 52, 56, 58, 94, 55, 57, 59, 61, 65

Chaired by Prof Preeta Sharan, Oxford College of Engineering, India

18:00-20:00 PM (Hawaii Time 5th January) (Indian Time: 9.30 AM 6 January 2022)

Session 3:

Chair: Prof Abhay Kumar, Jain University, Bangalore, India

Paper Id: 31, 48, 74, 110, 111, 112, 113, 114

6th January 2022

10:00-11:00 AM (Hawaii Time)

Inaugural Speech: Chair Prof Jason Levy, University of Hawaii, USA

12:00-14:00 (Hawaii Time)

Session 4:

Chair: Dr Jason Levy, University of Hawaii, India

Paper Id: 14, 45, 46, 53, 54, 63, 77

15:00-17:00 PM (Hawaii Time)

Session 5:

Chair: Dr Bishwajeet Pandey, Jain University, Bangalore, India

Paper Id: 71, 76, 82, 97, 146

ICGCET'15 Group Photo: First Conference at Dubai



RTCSE'16 Group Photo: 2nd Conference at Malaysia



ICGCET'2016 Group Photo:3rd Conference at Denmark

Institut i Esbjerg samler forskere fra hele verden

DEL   Af **Edmund Jacobsen** 15. august 2016 kl. 05:31

40 forskere og studerende fra hele verden samles på Institut for Energiteknik, Aalborg Universitet Esbjerg, i tre dage i denne uge, når der afvikles en international konference, der handler om at gøre computerteknologi mere grøn.

D.M. Akbar Hussain, lektor ved Institut for Energiteknik på Aalborg Universitet Esbjerg, har sammen med en kollega fra Indien arrangeret konferencen International Conference on Green Computing and Engineering Technologies.

Det er planen, at disse konferencer skal afvikles i Esbjerg hvert andet år – ganske enkelt fordi Institut for Energiteknik i Esbjerg er internationalt anerkendt.



RTCSE'17 Group Photo: 4th Conference at Malaysia



IMCES'17 Group Photo: 5th Conference at Malaysia



ICGCET'2017 Group Photo: 6th Conference at Ireland



RTCSE'18 Group Photo: 7th Conference at Thailand



ICGCET'18 Group Photo: 8th Conference at Denmark



RTCSE'19 Group Photo: 9th Conference at Hawaii, USA



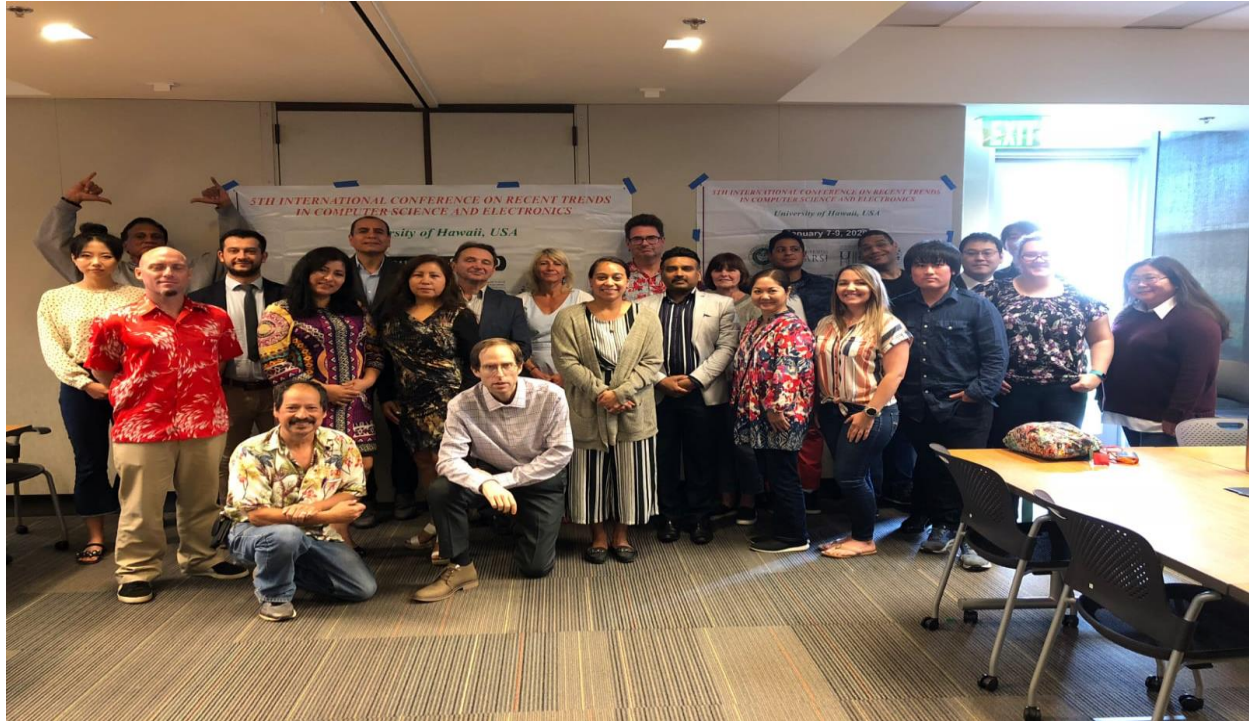
IMCES'2019 Group Photo:10th Conference at Mauritius



ICGCET'2019 Group Photo: 11th Conference at Morocco



RTCSE'20 Group Photo: 12th Conference at Hawaii, USA



IMCES'2020 13th Conference at Indonesia: No Photo Due to Covid-19 Lockdown

ICGCET'2020 14th Conference at St Petersburg, Russia: No Photo Due to Covid-19 Lockdown



Jammu, September 18: Dr. Amit Kant Pandit, Faculty, SoECE, SMVDU chaired an online session in 6th International Conference on Green Computing and Engineering Technologies (ICGCET®).

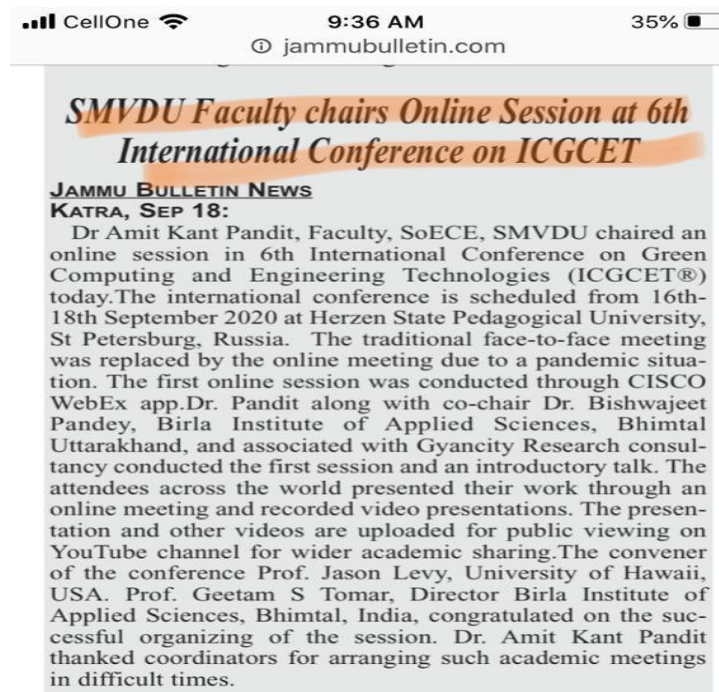
The international conference is scheduled from 16th-18th September 2020 at Herzen State Pedagogical University, St Petersburg, Russia. The traditional face-to-face meeting was replaced by the online meeting due to a pandemic situation. The first online session was conducted through CISCO WebEx app.

Dr. Pandit along with co-chair Dr. Bishwajeet Pandey, Birla Institute of Applied Sciences, Bhimtal Uttarakhand, and associated with Gyancity Research consultancy conducted the first session and an introductory talk.

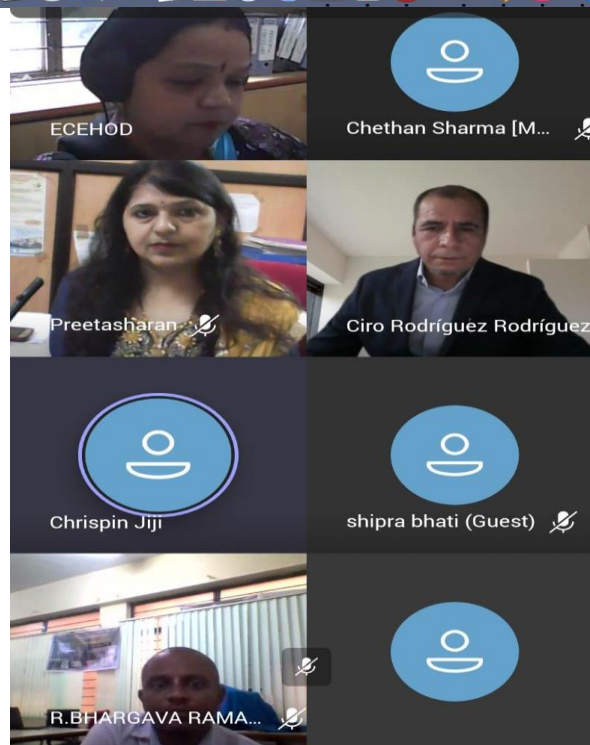
The attendees across the world presented their work through an online meeting and recorded video presentations. The presentation and other videos are uploaded for public viewing on YouTube channel for wider academic sharing.

The convener of the conference Prof. Jason Levy, University of Hawaii, USA. Prof. Geetam S Tomar, Director Birla Institute of Applied Sciences, Bhimtal, India, congratulated on the successful organizing of the session.

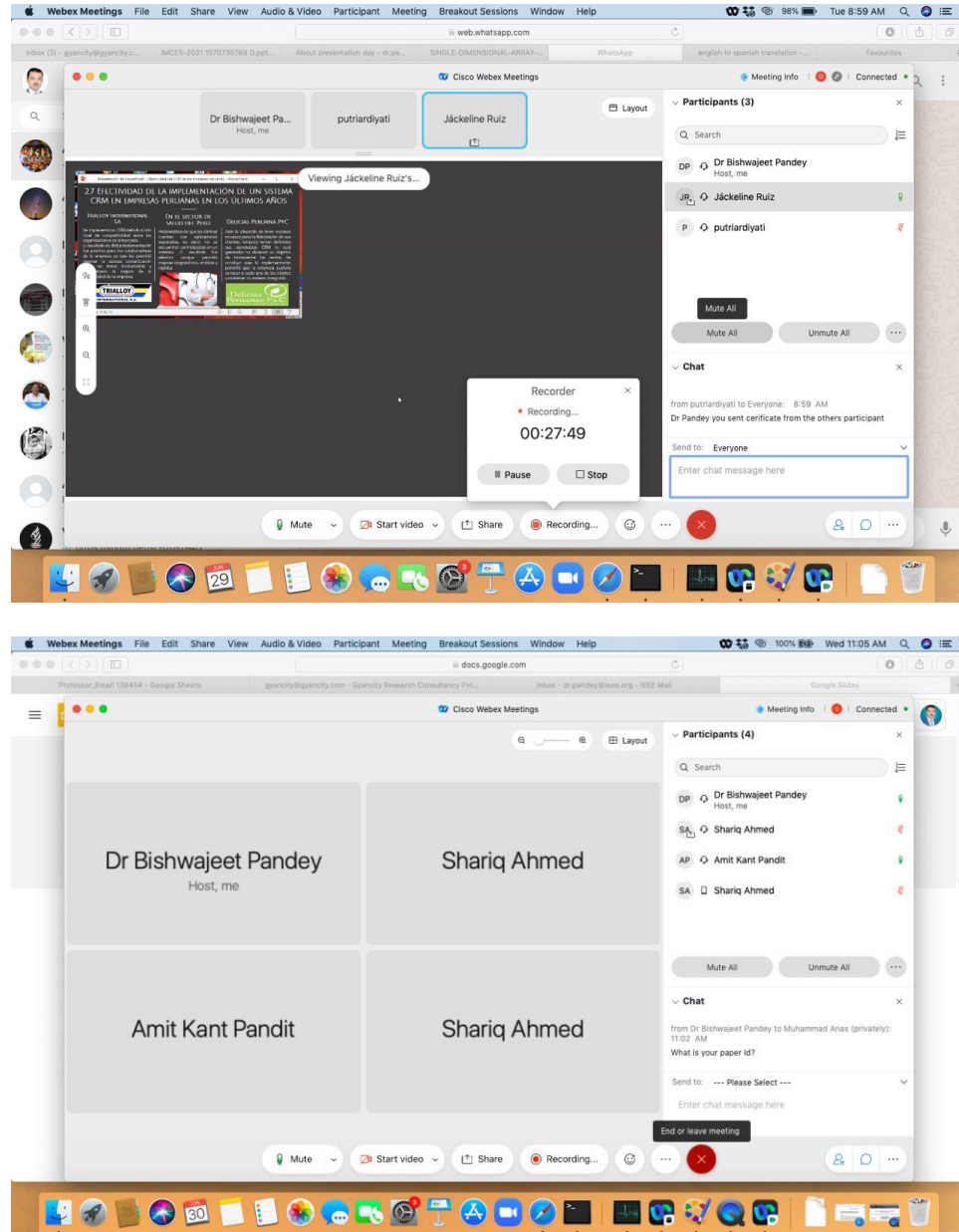
Dr. Amit Kant Pandit thanked coordinators for arranging such academic meetings in difficult times.



RTCSE'2021 15th Conference at Hawaii, USA



BMESS'2021 16th Virtual Conference (NO Photo Taken at Venue) IMCES'2021 17th Conference at Jakarta, Indonesia



ICGCET'2021 18th Conference at Lima, Peru

Evento se dará el 22 y 23 de septiembre. Foto: difusión



La República
@larepublica_pe
ediciondigital@glr.pe

16 Set 2021 | 12:40 h

Actualizado el 16 de Setiembre 2021 | 12:40 h

Este 22 y 23 de septiembre se realizará la 7ª Conferencia Internacional sobre Tecnologías de Ingeniería y Computación Ecológicas 2021 (ICGCET-2021) y la 13ª Conferencia Internacional en Inteligencia Computacional y Redes de Comunicación 2021 (CICN 2021), eventos que tendrán como sede a la Universidad Villareal (UNFV).

Juan Alfaro, rector de la UNFV, será el encargado de inaugurar los referidos certámenes, el miércoles 22 a las 10.00 a. m. Previamente, Akbar Hussain, de la Universidad Aalborg de Dinamarca, será el encargado de brindar las palabras de bienvenida.

La ICGCET-2021 presentará las investigaciones de diferentes áreas de la ciencia y la tecnología, y proporcionará una plataforma para que investigadores y científicos de todo el mundo intercambien y compartan sus experiencias y resultados de investigación.



NOTAS DE PRENSA

Conferencias internacionales se desarrollarán en Universidad Villareal

Cada evento contará con la participación de destacados expertos de la investigación.



Abstract of Paper Accepted in RTCSE'2022

1	<p style="text-align: center;">A Comparative Study on Useful Learning Algorithms Used for the Stock Market Analysis or Prediction</p> <p style="text-align: center;">Ahsan Masroor, Sallar Khan, Jawaria Hafeez Siddiqui, Abdul Khaliq, Shariq Ahmed, Parshan Kumar</p> <p style="text-align: center;">Sir Syed University of Engineering and Technology, Karachi Pakistan. Ahsanmath@yahoo.com, Sallarkhan_92@yahoo.com, h.jawaria@yahoo.com, akhaliq.ciit@gmail.com, shariqahmedssuet@gmail.com, parshankumarssuet@gmail.com</p> <p style="text-align: center;">ABSTRACT</p> <p>Predicting, analyzing, and forecasting financial markets always remain a challenging task for investors and researchers around the globe. Many authors implemented and discussed various learning models for their studies and conclude many hypothesizes, the fundamental objective of our study is to discuss all the possible learning algorithms or models used by the authors in this area of financial marketing also to highlight the optimal or state of art learning algorithm which produced the effective results among the many studies. This study will help out future researchers to choose the best possible learning technique for their desire financial market problem, also it can help many researchers to choose the optimal technique for the creation of any of their future products for the field of the stock market.</p> <p>Keywords: Learning Algorithms, Stock Market Analysis, Stock Market Prediction.</p>
---	---

Abstract of Paper Accepted in RTCSE'2022

13	<p style="text-align: center;">Hydro Discharging Chamber Kinematic Systems and Perspectives of their Application in Electric Drives</p> <p style="text-align: center;">Maia Tughushi, Zaza Shubladze, Gocha Gogitidze , Madona Loria, Firuza Varshanidze, Guram Futkaradze Batumi State Maritime Academy, Batumi, Georgia, m.tughushi@bsma.edu.ge, z.shubladze@bsma.edu.ge, g.s.gogitidze@bsma.edu.ge, m.loria@bsu.edu.ge, f.varshanidze@bsma.edu.ge, g.futkaradze@bsma.edu.ge</p> <p style="text-align: center;">ABSTRACT</p> <p>Electrohydraulic systems/drives are widely used in propulsion devices in order to increase efficiency of energy transfer and to reduce energy losses. These systems/drives are generally used in high voltage power plants. Along with their advantages they have some disadvantages. In order to improve system characteristics on basis of results received in experiential research, the perspective of application of electrohydraulic effect in propulsion devices has been defined. It would result in improvement of electrohydraulic system, reducing of transmission rings that would cause efficiency rise.</p> <p>Keywords: Electrohydrodischarging Chamber, Piston Movement, device operation.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

14	<p style="text-align: center;">VARIABLE ON-TIME CONTROL SCHEME TO ACHIEVE HIGH EFFICIENCY FOR AC/DC BORDER LINE CURRENT MODE BUCK CONVERTER</p> <p style="text-align: center;">Abdul Hakeem Memon, Asif Zahoor Shaikh, Zubair Ahmed Memon, Anwar Ahmed Memon</p> <p style="text-align: center;">IICT, Mehran UET, Jamshoro, Sindh, Pakistan hakeem.memon@faculty.muett.edu.pk, asifzahoorshaikh@gmail.com, zubair.memon@faculty.muett.edu.pk, anwar.memon@faculty.muett.edu.pk</p> <p style="text-align: center;">ABSTRACT</p> <p>The Buck power factor improvement converter (BPFIC) is much better topology because of having advantages like less inrush current, less voltage gain ratio, gives less voltage output ripple and steps down the voltage even with high input voltage, protection from short circuit and its single active switch operation makes it attractive. However borderline current mode (BCM) operated with fixed on-time control technique (FOCT) results in its low efficiency. The main reason of low efficiency is due to high conduction and switching losses which occur due to high peak and rms inductor current. In this paper, varying on-time control technique (VOCT) has been implemented that reduces the peak value of current which results in improved efficiency. In the proposed research, work is related to BPFIC operating in BCM because BCM has many advantages like no reverse recovery of diode, and zero current turning off the switch. To verify the effectiveness of proposed control technique, comparative analysis is obtained between both the two control techniques using SABER SIMULATOR. It is found that VOCT improves the converter's efficiency compared to FOCT.</p> <p>Keywords: Buck power factor improvement converter (BPFIC), borderline current mode (BCM), fixed on-time control technique (FOCT), varying on-time control technique (VOCT), Saber Simulation</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

15	<p style="text-align: center;">Intelligent Technologies for Automating the Process of Computer Simulator's Developing</p> <p style="text-align: center;">Igor Kotsyuba¹ Vladimir Naumov² Aleksey Shikov² Maxim Bakin³ Pavel Shikov</p> <p style="text-align: center;">¹ITMO University, Russia ²Russian Presidential Academy of National Economy and Public Administration, Saint Petersburg, Russia ³Saint-Petersburg State University of Industrial Technologies and Design, Saint Petersburg, Russia igor.kotciuba@gmail.com, naumov-vn@ranepa.ru, shik-off@mail.ru, mv.bakin@icloud.com, pavel.shikov@mail.ru</p> <p style="text-align: center;">ABSTRACT</p> <p>The article presents an analysis of progressive evolution and the formation of an educational environment for the development of a computer simulator based on the construction of a fuzzy semantic model. It is discussed that the process of developing a computer simulator is now more and more associated with the construction of a knowledge model based on a semantic network, which allows ensuring the required speed and quality of information modeling of a high-level technological process. It is discussed that significant attention should be paid to the visualization aspects when designing semantic models. One of intermediate models that can be used are mind maps, concept maps, fuzzy cognitive maps. The most convenient and frequently used model in the field of technological models representing is the model of fuzzy cognitive maps. This tool is implemented on the basis of the three components: mind map construction, concept map construction and fuzzy cognitive map simulator construction and methods of their quality evaluation. This paper highlights insufficiency in methodological study of modern technological capabilities and software in the organization of the educational process. This study is an attempt to summarize the methodology for educational instruments by means of innovative technological advantages.</p> <p>Keywords: Graph structures, mind map, computer simulator, concept map, fuzzy semantic model, fuzzy cognitive map</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

16	<p style="text-align: center;">Teleworking and worker productivity of Peruvian incoming tour operators</p> <p style="text-align: center;">Liz Pacheco-Pumaleque Mauro Granados-Maguño Universidad Nacional Mayor de San Marcos, Lima – Perú, liz.pacheco@unmsm.edu.pe, mgranadosm@unmsm.edu.pe</p> <p style="text-align: center;">Alex Pacheco Universidad Nacional de Cañete, Lima – Perú, apacheco@undc.edu.pe</p> <p style="text-align: center;">Edwin Vegas-Gallo Universidad Peruana de Ciencias e Informatica, Lima – Perú, edwinvegasgallo@hotmail.com</p> <p style="text-align: center;">Rosario Pariona-Luque Universidad Nacional Autónoma de Huanta, Ayacucho – Perú, rpariona@unah.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>One of the most important changes that took place in 2020 due to the COVID-19 pandemic was that millions of people worldwide began to telework. However, many companies were not prepared for this change, causing bad experiences with teleworking, hearing teleworkers say that they are stressed, or managers worried about the work performance of their collaborators, who were looking for ways to control times so as not to decrease their productivity. Therefore, the objective of this research is to determine the influence of telework on worker productivity of Peruvian incoming tour operators, addressing the organizational change they made, the management of information and communication technologies ICT, physical distance, and self-programming of tasks by collaborators. The methodology is quantitative, applied, non-experimental, cross-sectional, and correlational. Likewise, the data collection technique was a survey, applying a structured questionnaire to the managers and / or leaders of the main Peruvian receptive tour operators. The findings show that there is a moderate positive correlation (.672) and a positive significance (.000) between teleworking and worker productivity. The research concluded that tour operators present a significant positive relationship in the organizational change and ICT dimensions; and to a lesser extent in the distance and self-programming dimensions, leading companies to strengthen these dimensions so that teleworking can positively impact worker productivity.</p> <p>Keywords: telework, productivity, human factors, knowledge worker, tour operators.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

28	<p style="text-align: center;">Unreal Engine's Realistic War First-Third Person Shooting Game: FALLEN HEROES</p> <p style="text-align: center;">Sallar Khan, Syed Nabeel Ahmed, Ayesha Khaliq, Shahzaib, Muhammad Irfan, Muhammad Okasha Imran Sir Syed University of Engineering and Technology, Karachi, Pakistan. sallarkhan_92@yahoo.com, nabeelid3ntikal@gmail.com, ayeshakhaliq@live.com, shahzaibwahid124@gmail.com, muhammad.irfan40422@gmail.com, muhammadokasha037@gmail.com</p> <p style="text-align: center;">ABSTRACT</p> <p>Research has shown that there is a connection between first-person and third-party shooter video games and higher mental flexibility. People in such games were found to require a far lower response time to move between difficult tasks, partly because they require rapid reactions to quickly moving graphics by building a responsive mindset when playing FPS or TPS. The successful design, attractive visuals and models of both the FPS and TPS games will provide you with the best experience in playing the game. The FPS and TPS games are a kind of 3D video game that has been a popular day in the field of gaming. The game is a kind of 3D video game. Combat and action centered history are the key design aspect of this style of game. This game is also a role player, as the player has to play from the main player's point of view.</p> <p>Keywords: Frist-Third Person Shooting Game, Unreal Engine, Game Development.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

29	<div data-bbox="505 331 1328 436" data-label="Section-Header"> <h3>VR CHESS: A FLUTTER BASED CHESS APPLICATION</h3> </div> <div data-bbox="414 472 1427 546" data-label="Text"> <p>Sallar Khan, Danyal Zia, Anum Siddiqui, Muhammad Ghulam Murtaza, Syed Kashan Raza, Owais Uddin Ahmed</p> </div> <div data-bbox="472 569 1364 609" data-label="Text"> <p>Sir Syed University of Engineering & Technology Karachi, Pakistan</p> </div> <div data-bbox="555 634 1278 745" data-label="Text"> <p>Sallarkhan_92@yahoo.com, danyal.ziaa@gmail.com, ansiddiqui@ssuet.edu.pk, gmurtuza95@yahoo.com, Kashanrazab@gmail.com, owaisahmed68@gmail.com</p> </div> <div data-bbox="823 777 1008 812" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="410 840 1432 1207" data-label="Text"> <p>In the current modern era of entertainment through technology, the game industry is getting the high revenues and user feedbacks around the globe. In this research we have developed a mobile based Chess game using Flutter, in which user can play by tapping on the screen for the pieces to move. It has a variety of application and piece themes with an easy-to-understand interface. The game also has many more options like game modes (Player one vs. Player two /Player one vs. AI Bot), time limits, side selection (black, white, or random), and AI bot difficulty level. The main objective of this game is to provide an entertainment platform to the user with user friendly environment with some extraordinary choice of user interface.</p> </div> <div data-bbox="410 1230 1370 1268" data-label="Text"> <p>Keywords: Mobile application, Flutter, Chess Game, Game Development.</p> </div>
----	--

Abstract of Paper Accepted in RTCSE'2022

30	<p style="text-align: center;">Soccer Flix: Score and Match Predictor using Deep Neural Network and Logistic Regression</p> <p style="text-align: center;">Sallar Khan, Muhammad Ali Qureshi, Ayesha Urooj, Muhammad Humza Masood, Ashar Ali, Muhammad Saif Ali Rizvi Sir Syed University of Engineering and Technology</p> <p style="text-align: center;">Sallarkhan_92@yahoo.com, muhammadali.q98@gmail.com, Aurooj161@yahoo.com, muhammadhumza59@gmail.com, asharali100@gmail.com, saif_rizvi113@yahoo.com</p> <p style="text-align: center;">ABSTRACT</p> <p>To solve the problem of loss of interest in soccer over the time because of the busy life and predicting the outcome of soccer is also an interesting challenging which led to the creation of this idea. The purpose of this paper is to provide a single platform to soccer freaks in which they can find the E-Commerce (Soccer Kits, Customized Kits too), Scores, Calendar, Soccer Related News and Prediction too. The whole website is based on PHP for scores, calendar and new we use Rapid API and for prediction we use datasets which goes through the methods of cleaning, selection, preprocessing and model training, after that we used different algorithms i.e., Logistic Regression, LSTM, RNN and Deep Neural Networks but in the end we implement Logistic Regression and Deep Neural Networks. The datasets which we are using is from 1872 to 2016 for International matches and for Leagues we are using the dataset from 2008 to 2018 to get the higher accuracy. The whole process of creating website and predicting algorithm saves a lot of time of soccer freaks and they can see anything related to soccer from anywhere.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

31	<p data-bbox="435 331 1414 436">Remote Laboratories for Measurement courses during the Covid-19 era</p> <p data-bbox="444 472 1404 541">C. Liguori, A. Pietrosanto, M. Carratù, V. Paciello, M. De Santo, G. Di Leo, M. Ferro</p> <p data-bbox="542 573 1307 642">Department of Industrial Engineering, University of Salerno tliguori@unisa.it</p> <p data-bbox="841 680 1008 709">ABSTRACT</p> <p data-bbox="435 745 1414 1325">The role of experiments in the laboratory for the bachelor's and the master's Science degree in Electronic Engineering is fundamental for full training. In Italy, from the first days of March 2020, all education activities were changed in distance learning due to the severe lockdown caused by the COVID-19 sanitary emergency. At the beginning of the second-semester sanitary emergency pushed the authors to find new strategies to keep high-level learning even in remote modalities as soon as possible. Preparing students for the use of measuring instruments soon appeared to be the most challenging test for professors accustomed to having students in their laboratories every day. Therefore, the University of Salerno (UniSA) professors rapidly converted all their laboratory didactic activities to this aim. After a brief description of the UniSA measurement courses, the paper describes some distance learning solutions adopted in both bachelor and master science courses. Particular details will be given to the efforts made to manage 24h availability of the laboratory instrumentation and circuits for student experiments.</p> <p data-bbox="435 1356 1252 1388">Keywords: Remote laboratory, Covid era, Measurement course.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

32	<p style="text-align: center;">An Evaluation Dynamic Educational Model for Measuring the Influence of E-Learning in Arabic Language Acquisition</p> <p style="text-align: center;">Elsayed Makki Elbishr Ali Hassan^{1*}, Mohamad Anas bin Almuhsin², Zarima Mohd Zakaria³, Nazri bin Atoh⁴</p> <p style="text-align: center;">^{1,2,3,4}FBK- Sultan Idris Education University (UPSI) Malaysia</p> <p style="text-align: center;">*elsayed@fbk.upsi.edu.my</p> <p style="text-align: center;">ABSTRACT</p> <p>The usage of technology in language education is gaining popularity because it offers many benefits to the users. E-learning was introduced as a new learning process in the existing education system to improve student educational performance. Based on the findings from previous studies, there are several factors have been identified able to influence the variations in student performance. Also based on the findings from previous studies - Literature Review- the researchers focus on how they can create a model, but this study wants to propose a model for Arabic to non-native speakers, and how can we benefit from it to make learning the Arabic language easy for non-Arabic speakers. Therefore, this study proposes a model which can be serve as a benchmark for measuring the effectiveness of learning process by using e-learning concept and the factors identified consists of learner traits, learning method, learning experience and duration of e-learning. Meanwhile, learner performance measure based on online test score and exam grade. The models of e-learning in this study specifically propose to the education sector in the field of learning a second language (Arabic for non-native speakers) studies. The study applied descriptive analysis methodology. The framework of the research procedures is data collection, data analasis and discussion. Moreover, the model in this study is expected to be applicable to other fields of education and able to be used as a reference for the future research.</p> <p>Keywords: E-learning; Learner traits; Learner individual differences; Learning style; Learner performance.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

33	<p style="text-align: center;">The Influence of Multimedia in Teaching Languages - Arabic Language as A Study</p> <p style="text-align: center;">¹Yousef A.Baker El-Ebiary, ²Elsayed Makki Elbishr Ali Hassan, ^{*3}Ibrahim Babikir Elhag, ⁴Hassan Suleiman, ⁵Koussoube Issa</p> <p style="text-align: center;">¹Faculty of Informatics and Computing, UniSZA, Malaysia yousefelebiary@unisza.edu.my</p> <p style="text-align: center;">² Sultan Idris Education University, Malaysia, elsayed@fbk.upsi.edu.my</p> <p style="text-align: center;">^{*3}Universiti Islam Antarabangsa Sultan Abdul Halim Mu'adzam Shah (UniSHAMS), Malaysia ibrahemalhag@gmail.com</p> <p style="text-align: center;">⁴International Islamic University, Malaysia. abuxzubair@iium.edu.my</p> <p style="text-align: center;">⁵Al-Madinah International University, Malaysia koussoube.issa@mediu.edu.my</p> <p style="text-align: center;">ABSTRACT</p> <p>Modern technologies today have become the basis of human life, and their uses have reached all areas of life. The use of modern technologies has also been greatly employed in education, especially in language learning. The Arabic language is one of the most important languages that native speakers and non-native speakers are interested in learning. Teaching languages using modern technologies and multimedia included all aspects of language such as composition, classification, classrooms and teaching methods. The aim of the study is to highlight the importance of modern educational technologies and multimedia in the field of Arabic language teaching and make it an important and indispensable basis for teaching Arabic and an integral part of the mechanisms used in teaching Arabic and a role model in its teaching methods.</p> <p>Keywords: Modern Technologies, Multimedia, Teaching Methods, Arabic Language, Online Learning.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

35	<p style="text-align: center;">SOLID WASTE MANAGEMENT IN THE DISTRICT MUNICIPALITY OF ANDAHUAYLAS – APURIMAC - PERU</p> <p style="text-align: center;">Wilbert Quispe Prado, Luis Guillermo Quiroz Bazan, Doris Esenarro Vargas <i>Universidad Nacional Federico Villarreal.</i> wquispe@unfv.edu.pe, uis.quiroz@uni.edu.pe, desenarro@unfv.edu.pe</p> <p style="text-align: center;">Susana Irene Davila Fernandez <i>Ricardo Palma University Peru.</i> susana.davila@urp.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The objective of this research is to carry out a diagnosis and proposal for solid waste management in the José María Arguedas District Municipality, Province of Andahuaylas, Apurímac. A sample size of 83 households was randomly selected. The diagnosis of solid waste generation reports a household average of 2.37 ± 1.33 kg/household/day (representing 83.62% of the solid waste generated), followed by the Restaurants source with an average generation of 2.81 ± 0.89 kg/day. The head with the lowest age was the Boticas with 0.27 ± 0.04 kg/day, showing a significant difference ($p\text{-value} < 0.05$) between the sources of solid waste generation. The characterization of household solid waste comprises 29.24% organic matter, 11.57% wood and foliage, and 27.06% inert matter. In comparison, the other types total 32.13%, organic waste totaled 43.38%, and organic waste 56.62%, with an average density of 116.43 kg/m³, average humidity of 73%, and average per capita production of 0.498 kg/person/day. The formulation of solid waste management proposes strengthening and expanding local waste recycling systems, as well as raising community awareness of the importance of household solid waste collection and management through talks and workshops in educational institutions and neighborhood councils, emphasizing reuse and recycling, which should be proposed and developed by the District Municipality.</p> <p>Keywords: Solid waste, diagnosis, characterization, management, and handling.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

36	<p>PROJECT MANAGEMENT AND ITS RELATION TO LAND MANAGEMENT IN THE SAN PABLO TOWN CENTER, VALERA DISTRICT, BONGARÁ - AMAZONAS.</p> <p>Roberto Valdivia Sagastegui, Felix David Avila Arguedas, Jorge Eduardo Injante Huarancca, Doris Esenarro Vargas Universidad Nacional Federico Villarreal. rvaldivia@unfv.edu.pe, favila@unfv.edu.pe, jeduardo.arq.dis@gmail.com, desenarro@unfv.edu.pe,</p> <p>ABSTRACT</p> <p>The objective of this research is to propose project management and its relationship with the control of the territory, in the population nucleus of San Pablo, district of Valera, Bongará-Amazonas, the inadequate management of the projects results in the misuse and management of the territory, as well as in each of its specific aspects for each subzone of the region, the research has a qualitative approach, descriptive-explanatory type. The sources were primary, including the plan mentioned above and supporting documents. The main instrument was a data collection table of our elaboration and based on the Corine Land Cover model. It was also based on data collection, mapping, and measuring geographic areas, both from documents and the field. As a result, a quantity of territory is proposed for each activity, delimiting it in a suitable place through projects for the adequate management of the region. In the case of the "Agricultural and Reforestation Zone", of a total of 1,042 Ha, 937.8 Ha (90% can be recovered, so it is emphasized that projects and their prior management, from the planning stage at the territorial level, can give an approximation of what is expected for its future execution and be more efficient.</p> <p>Keywords: Management, projects, territory, ordering.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

37	<p style="text-align: center;">BEEKEEPING PRODUCTION IN THREE LIFE ZONES AS A STRATEGY FOR ENVIRONMENTAL SUSTAINABILITY IN APURIMAC, PERU – 2021</p> <p style="text-align: center;">Wilbert Quispe Prado, Doris Esenarro Vargas, Luis Guillermo Quiroz Bazan</p> <p style="text-align: center;">Universidad Nacional Federico Villarreal. wquispe@unfv.edu.pe, desenarro@unfv.edu.pe, luis.quiroz@uni.edu.pe</p> <p style="text-align: center;">Susana Irene Davila Fernandez Ricardo Palma University Peru. susana.davila@urp.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The present research aims to evaluate beekeeping production in three life zones as a strategy for environmental sustainability in Apurimac, the life zones are Pampas, Chicmo and Huancaray, where beekeeping is considered as a secondary and precarious activity with limited production capacity, which causes low agricultural production due to the lack of pollinators and a decrease in economic income, it was conducted with a cross-sectional descriptive design, data collection was through a structured questionnaire of interviews and direct observation sampling. In the three dimensions that are economic, social and environmental, each one with 5 study indicators, financial autonomy, economic stability, net monthly income, use of technology, management of number of hives, in social, job satisfaction, access to health, social integration, access to education, access to essential services, in environmental, impacts on natural resources, impacts on local biodiversity, use of chemicals, availability of melliferous flora, level of vegetative cover were considered. The methodology to determine sustainability was the Biogram with a scale of 0 - 0.5. It was evaluated with the statistical analysis ANOVA at 5% and compared the sustainability indexes with a Student's t-test at 5%. The results of the sustainability indexes for each study zone were: Pampas life zone 0.41 corresponds to optimal sustainability, Chicmo life zone 0.38 corresponds to stable sustainability, and Huancaray life zone 0.40 corresponds to sound sustainability.</p> <p>Keywords: sustainability, beekeeping, bee production.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

43	<p style="text-align: center;">rocketEngine – A rocket engine propulsion package in the Tcl command language (Tcl)</p> <p style="text-align: center;">Frank Morlang German Aerospace Center (DLR), Germany frank.morlang@dlr.de</p> <p style="text-align: center;">ABSTRACT</p> <p>DLR's SpaceLiner orbiter concept flight simulator bases on a thrustless flight dynamics model for associated descent/approach trajectory analyses. Investigations of the rocket-propelled ascent phase demand the implementation of simulated thrust. For that purpose, a Tcl rocket engine propulsion package has been developed. Its configurable parametrization including the transient regime is described. Package usage test results in a standalone application show a thrust update interval below 4 milliseconds (median). Future options of different human-in-the-loop real-time system of systems integration capabilities are presented and discussed.</p> <p>Keywords: aerospace, Tcl/Tk, distributed simulation</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

45	<p style="text-align: center;">APPLICATION OF ORDINANCE N° 310-2009-MDJM, AND NOISE POLLUTION FROM THE VEHICLE FLEET IN THE DISTRICT OF JESÚS MARÍA -2020</p> <p style="text-align: center;">Maria Veliz Garagatti, Vicenta Tafur Anzualdo, Susana Irene Davila Fernandez, Doris Esenarro Vargas Federico Villarreal National University Peru.. mveliz@unfv.edu.pe, itafur@unfv.edu.pe, susana.davila@urp.edu.pe, desenarro@unfv.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The present research work analyzes the noise pollution of the automobile fleet in the District of Jesús María located in Lima - Perú. The general objective was “To determine the incidence of the application of Ordinance N° 310- 2009-MDJM. in the noise pollution of the vehicle fleet in the district of Jesús María, 2020” the type of research is applied; descriptive and explanatory level and non-experimental design. The population object of study was constituted by the inhabitants of the district and the floating population, considering a non-probabilistic sample of 210 people. The instruments used were: measurements of sound pressure in fixed stations, counting of public and private vehicles in the time of measurement of good pressure, and a questionnaire that was validated by expert judges, the same one that constituted 32 items of the scale of Likert. The results found in the sound pressure measurements exceeded the maximum sustainability of the analyzed Ordinance, showing noise pollution. The statistical test used was the Spearman correlation coefficient, determining that there are differences in noise pollution at the stations and not at the timetables; that public and private vehicles increase sound pressure measurements under different conditions; concluding that: “The application of Ordinance N° 310- 2009-MDJM significantly affects noise pollution in the vehicle fleet in the district of Jesús María, 2020”.</p> <p>Keywords: Noise Pollution, Vehicle fleet, Ordinance, Public vehicles, Private vehicles.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

46	<p>The Architect member of the Supervisory Team in the Construction of Multifamily Buildings.</p> <p>Felix David Avila Arguedas, Roberto Valdivia Sagastegui, Jorge Eduardo Injante Huarancca, Doris Esenarro Vargas <i>Universidad Nacional Federico Villarreal.</i> favila@unfv.edu.pe, desenarro@unfv.edu.pe</p> <p>ABSTRACT</p> <p>This research aims to determine the incidence of the architect of the supervisory team in the conformity of work in multifamily buildings in 2019, allowing us to see the participation of the architect as a supervisor in the results and how their participation influences. The methodology used is composed of a non-experimental type of research, a mixed approach because it is qualitative and quantitative with a descriptive correlational scope; through the observation of items and the use of surveys, with a sample of 47 multi-family buildings. According to the results obtained from the statistical process, the confirmation of the general hypothesis with a correlation of (0.715) is mentioned, in the same way in the case of trace control and stakeout with a correlation of (0.838); of the fixed finishes of (0.798) and the non-fixed finishes with a correlation of (0.870). Finally, it is concluded that the architect's role as a supervisor is a function that can be carried out in work to achieve the conformity of a piece of multi-family buildings and the control of the line and the disposition elements Fixed. Non-fixed finishes are related and influence the decrease in observations on the variation of measurements and dimensions in the quality and conformity of the work of multi-family buildings.</p> <p>Keywords: Work supervision, Multifamily buildings, Supervisory team, Supervising architect, Fixed and non-fixed finishes to the structure.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

47	<p style="text-align: center;">Evaluation of free technologies for the management of metadata in digital repositories for governmental entities</p> <p style="text-align: center;">Daniel Yucra¹, Julio Sotomayor², Jorge Mayhuasca², Antonio Arroyo³, Carmen Chicasaca⁴, Wilson Marin⁵</p> <p style="text-align: center;">¹Scientific University of the South dyucra@cientifica.edu.pe</p> <p style="text-align: center;">²National University Federico Villarreal jsotomayor@unfv.edu.pe, jmayhuasca@unfv.edu.pe</p> <p style="text-align: center;">³National University of the Altiplano arroyopaz@unap.edu.pe</p> <p style="text-align: center;">⁴Alas Peruanas University c_chicasaca@alu.uap.edu.pe</p> <p style="text-align: center;">⁵César Vallejo University wmarinv@ucv.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>This article presents the results obtained from the evaluation of free technologies for the management of metadata in digital repositories for governmental entities. The methods and procedures consisted of a literature search on digital repository software for data and metadata management, testing and evaluation of alternative solutions, as well as considering functional requirements as a basis: cataloging and data and metadata management systems. The result of this work highlights the characteristics, capabilities, and functionalities of each software that presents resources for building a data repository, sharing data, and representing it to users. In addition, technical evaluation criteria for testing, evaluation, and selection are presented. This proposal allows government sector entities to achieve technological sovereignty and independence, in addition to promoting the publication of open data for open government management.</p> <p>Keywords: Digital Repository, Metadata, Open Data.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

48	<p data-bbox="337 380 1414 485">Desarrollo de un Sistema de Imágenes Geográficas con VB .net</p> <p data-bbox="518 516 1234 554">Manuel Narro¹, Jorge Mayhuasca², Martín Gavino³</p> <p data-bbox="399 579 1352 653">^{1,2}National University Federico Villarreal - UNFV, Lima, Perú narro@unfv.edu.pe¹; mayhuasca@unfv.edu.pe²; mmgavino@unfv.edu.pe³</p> <p data-bbox="789 682 964 714">ABSTRACT</p> <p data-bbox="334 743 1401 852">This article presents a research on the development of an application that meets the criteria of a Images Geographic System from receiving information focusing on the use of images in Visual Basic Net is presented..</p> <p data-bbox="334 879 1252 913">Keywords: Visual Basic .Net., Images Geographic Information System</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

49	<p style="text-align: center;">Automation of report generation for functional testing - E-Services Operator</p> <p style="text-align: center;">Rogelio Cohello, Ivan Petrlik, Karin Rojas, Jorge Mayhuasca</p> <p style="text-align: center;">National University of Federico Villareal, Peru</p> <p style="text-align: center;">rcohello@unfv.edu.pe, ipetrlik@unfv.edu.pe, Krojasr@unfv.edu.pe, jmayhuasca@unfv.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>Technology advances every day, because the business world should not be left behind in it, so there is the adoption of new ways of doing business. This is how ICT (Information and Communication Technologies) plays a key role in these new companies converting traditional processes such as bringing your customers through a web converting to e-Commerce, to a digital process. Due to the rise of ICT has been the implementation of electronic billing systems, this type of systems come to stay; improvements are given based on an already predetermined structure, mapping in a better way the taxes and operations of taxpayers. Then, this type of business implies having well-trained IT and accounting staff that allows the online sending of the CPE (electronic receipts). Therefore, this project seeks to improve an internal process in the development phase of the OSE BIZ LINKS that grants validity to electronic receipts, for we will use tools that can be reusable over time, such as Data-Driven Testing, which is a testing technique that has as its pillar two types of data: real data (functional test results) and expected data (results that should have each functional test case), making a comparison of both proceeding to give a report according to each data compared in this process.</p> <p>Keywords: ICT, electronic invoicing, electronic receipts, Data-Driven Testing, TDD, reporting.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

50	<p style="text-align: center;">Database of the SBELLA system based on the SCRUM framework for decision-making of the Functional Unit of Health Products in the Local Government</p> <p style="text-align: center;">Karin ROJAS*, José COVEÑAS, Jorge MAYHUASCA, Rogelio COHELLO, Luis, CANDELA</p> <p style="text-align: center;">Federico Villareal National University, Lima, Perú. krojasr@unfv.edu.pe, jcovenas@unfv.edu.pe, jmayhuasca@unfv.edu.pe, rcohello@unfv.edu.pe, 2015019085@unfv.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>Within this context, the Functional Unit of Sanitary Products (UFPS) is responsible for the granting of rights under the denomination of Obligatory Sanitary Notifications (NSO) of the sanitary products, whose normative framework is composed by the supranational norm of the Andean Community of Nations (CAN), Decision 516 and the corresponding national normativity. The General Directorate of Medicines, Inputs and Drugs (DIGEMID), National Regulatory Authority (ANR), a line organ of the Ministry of Health, has the mission of guaranteeing the efficacy, safety and quality of pharmaceutical products, medical devices and health products, contributing to their access and rational use for the benefit of the population's health. Currently the Functional Unit of Sanitary Products (UFPS) does not have an updated database of Sanitary Notifications both issued, notified, canceled from 2017 to the present, also on the part of the data, they are not reliable or consistent source for a subject of consultations for the executive directors for the respective decision making.</p> <p>Keywords: Queries, database, decision making.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

52	<p style="text-align: center;">Optimal container storage plan built using the ant colony algorithm</p> <p style="text-align: center;">Sara SOUAINI, Jamal BENHRA</p> <p style="text-align: center;">LARILE Laboratory, OSIL TEAM ENSEM, Hassan II University of Casablanca, Casablanca, Morocco souainisara@gmail.com, jamalbenhra@gmail.com</p> <p style="text-align: center;">ABSTRACT</p> <p>In this paper, we study the container stacking problem (CSP) which is one of the most important problems in marine terminals. An optimization model is developed to determine the optimal storage strategy for different container handling schedules. The objective of the model is to minimize the distance between the ship's berthing location and the container storage positions. The CSP is solved by an efficient ant colony algorithm. Furthermore, numerical results for full-size instances have proven the effectiveness of the algorithm.</p> <p>Keywords: Metaheuristics, Ant Colony Algorithm, Container Staking Problem (CSP), Port Container Terminal</p>
----	--

54	<p data-bbox="378 262 1380 367" style="text-align: center;">The Podcast as a didactic resource and learning situated in higher education</p> <p data-bbox="396 409 1362 483" style="text-align: center;">Carmen Salazar¹, Tomás Rosales², Jorge Mayhuasca³, Melecio Carlos⁴, Santiago Patricio⁵, Cesar Gallardo⁶</p> <p data-bbox="586 483 1172 514" style="text-align: center;">^{2,3,5,6}Universidad Nacional Federico Villarreal</p> <p data-bbox="651 518 1109 552" style="text-align: center;">^{1,4}Universidad Tecnológica del Perú</p> <p data-bbox="431 558 1328 590" style="text-align: center;">c17059@utp.edu.pe, trosales@unfv.edu.pe, jmayhuasca@unfv.edu.pe</p> <p data-bbox="431 594 1328 625" style="text-align: center;">c19149@utp.edu.pe, spatricio@unfv.edu.pe, cgallardom@unfv.edu.pe</p> <p data-bbox="792 667 967 699" style="text-align: center;">ABSTRACT</p> <p data-bbox="337 705 1421 1066">The purpose of this research work was to determine the influence of the Podcast as a didactic resource in the learning situated in a Peruvian university, using the quantitative approach, with a non-experimental design, using a population of 200 students who used this resource during an academic semester. Information was collected through instruments that were validated by technology experts and validity was measured with Cronbach's alpha index. The results showed that according to the perception of the students there is a significant correlation between the study variables. In general, it can be affirmed after the results obtained that the students who used the podcast as a didactic resource are those who managed to consolidate some elements of learning in a situated context.</p> <p data-bbox="337 1104 1265 1138">Keywords: podcast, teaching resource, skills, higher education, learning</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

53	<p style="text-align: center;">Systems analysis model for micro and small businesses</p> <p style="text-align: center;">Eduardo Martin Cifuentes de Los Rios, Jorge Victor Mayhuasca Guerra Universidad Nacional Federico Villarreal, Peru ing.cifuentes@hotmail.com, jmayhuasca@unfv.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The objective of the research was to propose to the Micro and Small Businesses (MYPES) a friendly, gradual and cheap computer system that allows them to manage the companies according to the characteristics, their own needs and that is incremental in their options according to the growth of the same, within the Market of Goods and Services, since the MYPES constitute 99.1% of the business activity of Peru. The type of research was carried out under the quantitative approach, experimental design, quasi- experimental with a hypothetical deductive method, an instrument validated by expert judgments with a reliability according to the Cronbach's Alpha 0.908 was used, it is concluded that it should be done by industrial sectors, since according to the items it can be understood that they may have the same needs.</p> <p>Keywords: industrial operations, ERP, micro enterprises, foundries, supply chain, quality.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

55	<p style="text-align: center;">Radio spectrum transformation model and Small Cells for the Deployment of 5G Networks</p> <p style="text-align: center;">Ivan Petrlik¹, Santos Sotelo², Jorge Mayhuasca³, Roberto Esparza⁴, Henry Bermejo⁵</p> <p style="text-align: center;">^{1,5} University Cesar Vallejo ^{2,3,4} National University Federico Villarreal</p> <p style="text-align: center;">ipetrlika@ucvvirtual.edu.pe,² ssotelo@unfv.edu.pe,³jmayhuasca@unfv.edu.pe,⁴mesparza@unfv.edu.pe,⁵hbermejot@ucvvirtual.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The development of research work focused on the technology of 5G networks, during the study process it was possible to process and analyze data related to radiofrequency spectra, small cell systems, and technical aspects that make up the 5G infrastructure, therefore, wide and sufficient viability of deployment of 5G network technology is determined, in the period between 2020 and 2030, considering the improvement of services. In relation to small cells, sufficient characteristics and capacities are established in the 5G network technology, designed and built, which makes it possible to identify one of the most appropriate small cell structures, and obviously, it is possible to identify that between the wavelength of mean dipole and mean asymmetric dipole wavelength; The bandwidth is limited despite having applied optimization techniques in the structure, while the average asymmetric dipole wavelength was managed to experience the increase in bandwidth that allows increasing the line width, and in consequence, has high the size of the structure, relatively both small cell dipoles, have ephemeral degrees of release, hindering the increase in impedance bandwidth.</p> <p>Keywords: radio spectrum, frequency bands, small cells, deployment, and 5G</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

56

MSEs and Competitive Strategies for B2C E-Commerce in the Lima Region

Julio Sotomayor, Jorge Mayhuasca

National University Federico Villarreal

jsotomayor@unfv.edu.pe, jmayhuasca@unfv.edu.pe,

Daniel Yucra

Scientific University of the South

dyucra@cientifica.edu.pe

Antonio Arroyo

National University of the Altiplano

arroyopaz@unap.edu.pe

Wilson Marin

César Vallejo University

wmarinv@ucv.edu.pe

Carmen Chicasaca

Alas Peruanas University

c_chicasaca@alu.uap.edu.pe

ABSTRACT

The purpose of the study was to evaluate the Competitive Strategies in Micro and Small Enterprises (MSEs), which undertake and establish a Virtual Store, for E-Commerce on the Internet of the Company-Consumer type. The results obtained in the present investigation show us that in the Micro and Small Enterprises (MSEs), there is information referred to the analysis of the Business Environment, all this allows defining the guidelines of the characterization of Electronic Commerce and the competitive analysis of Electronic Commerce, generating in this way to establish a Virtual Store and to participate in the online business. Also according to the results of the analysis of the Web sites, The use of the competitive strategies of the Web sites (virtual stores) determines competitive advantage, that is to say, it shows us the new way of doing business, the understanding of the online sales, and how to present the products in such a way that they easily seduce the visitor, the general evaluation of the evaluated Web sites is observed, which is a challenge in front of the excessive competitiveness of the online businesses, the reason why it requires a constant reevaluation of the implemented strategies.

Keywords: Method, problem-solving, problem and competitive strategies, online store, web sites, web site evaluation.

Abstract of Paper Accepted in RTCSE'2022

57	<p style="text-align: center;">Mobile application automated exams with levels of help for learning engineering students</p> <p style="text-align: center;">Ivan Petrlik¹, Henry Bermejo², Jorge Mayhuasca³, Ciro Rodriguez⁴, José Coveñas⁵</p> <p style="text-align: center;">^{1,2} University Cesar Vallejo ^{1,3,4,5} National University Federico Villarreal</p> <p style="text-align: center;">ipetrlika@ucvirtual.edu.pe, hbermejot@ucvirtual.edu.pe, jmayhuasca@unfv.edu.pe, crodriguez@unfv.edu.pe, jcovenas@unfv.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The objective of this research is to determine to what extent the mobile app for automated exams with levels of help improves the learning of engineering students. The research has a quasi-experimental design. For data collection, the questionnaire was applied through a pretest and posttest applied through the mobile app. The sample consisted of university students of the engineering career of a university in Metropolitan Lima, Peru. The results showed that the average grade before the use of the mobile app was 10.38 and after the intervention was 14.27, achieving an increase of 37%, which reflects that the mobile app for automated exams with levels of help optimizes the learning of engineering students. As a conclusion, it was demonstrated that there are significant differences in the learning of engineering students after applying the mobile app in the results of the post-test evaluation ($p=0.000$): therefore, it is concluded that the mobile app optimizes learning and the null hypothesis is rejected.</p> <p>Keywords: mobile app, learning, exams, automated, students</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

59	<p style="text-align: center;">Application of the ID3 algorithm to optimize anchovy fishing</p> <p style="text-align: center;">Ivan Petrlik¹, Pedro Lezama², Henry Bermejo³, Jorge Mayhuasca⁴, Joe Mendoza⁵, Saúl Ascue⁶</p> <p style="text-align: center;">^{1,3} University Cesar Vallejo ^{2,4,5} National University Federico Villarreal ⁶ University Autónoma of Perú</p> <p style="text-align: center;">ipetrlika@ucvvirtual.edu.pe, plezama@unfv.edu.pe, hbermejot@ucvvirtual.edu.pe, jmayhuasca@unfv.edu.pe, 2015706348@unfv.edu.pe, SASCUE@autonoma.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>Data mining is a very important analysis that is widely used in multiple business processes, such as agriculture, medicine, fishing among others, and it is a very important element in decision-making systems. It is also primarily concerned with classification due to the dynamic varieties of available data sets. Decision tree-based classification is the foundation of all classification algorithms and is widely used by experts in all types of research. This research implements the ID3 algorithm in the fishing extraction process, allowing to optimize the efficiency and effectiveness of the anchovy fishing process.</p> <p>Keywords: Data mining, algorithm, efficiency, effectiveness, ID3.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

58	<p style="text-align: center;">Gamification tools and the learning of the subject of mathematics in students of the I cycle of Systems Engineering</p> <p style="text-align: center;">César León Velarde¹ · Guillermo Morales Romero², Silvia Fernández Flores^{3, E}</p> <p style="text-align: center;">¹Universidad Tecnológica del Perú, ²Universidad Nacional de Educación Enrique Guzmán y Valle – La Cantuta ^{3,4}Universidad de San Martín de Porres.</p> <p style="text-align: center;">¹c19593@utp.edu.pe, ²gmorales@une.edu.pe, ³sfernandez@usmpvirtual.edu.pe ⁴egutierrez@usmp.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The proposed research seeks to develop the relationship between gamification tools and learning the subject of mathematics in systems engineering students. It is developed through the quantitative approach, from a correlational approach, the method developed is pure experimental type, in which a control group and another experimental group are used to whom an instrument is applied before the manipulation of variables, after applying the treatment to one of the groups a post test is applied. There was a population of 180 students and a non-probabilistic sample of 28 students distributed in an experimental group. The survey technique was used to measure the variables and the questionnaire was used as an instrument, which was validated by means of expert judgment and reliability by means of the Kuder-Richardson 20 statistic (0.721 and 0.769 high reliability). The descriptive statistics yielded favorable results in the mean (Pretest=7.17 and Posttest= 16.14). The inferential statistics allowed us to prove favorably that gamification tools influence learning in the area of mathematics in first cycle systems engineering students (Tobt =20.4 >Tcri= 2.017).</p> <p>Keywords: Gamification, mathematics, learning, tools.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

61	<h1 style="text-align: center;">Warehouse ordering assistance system by a machine-learning robot using heuristic search</h1> <p style="text-align: center;">José Ogosi¹, Jorge Mayhuasca², Ivan Petrlik³, Ciro Rodriguez⁴, Roberto Esparza⁵, Henry Bermejo⁶ ^{1,3,6} University Cesar Vallejo ^{2,4,5} National University Federico Villarreal ¹jogosi@ucvvirtual.edu.pe, ²jmayhuasca@unfv.edu.pe, ³ipetrlika@ucvvirtual.edu.pe, ⁴crodriguez@unfv.edu.pe, ⁵mesparza@unfv.edu.pe, ⁶hbermejot@ucvvirtual.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The heuristic function (n) attempts to guide the search to quickly arrive at the solution. The objective of this study was to implement a heuristic search strategy A * to solve a real problem. It has the function of finding a solution to the problem using non-rigorous methods such as trial and error, rules of thumb, etc. The algorithm used to solve the problem is efficient. In addition, the results obtained on the console are as expected from the analysis, so there is assurance that the code is working correctly. This research can allow the copy function for modification of the data matrices and the creation of several matrices to cover all the data.</p> <p>Keywords: Algorithm, heuristics, classification, matrices, robot.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

63	<p style="text-align: center;">An Extended Petri Net Model with Learning Capabilities</p> <p style="text-align: center;">Luis Amado Hernandez-Cabrera, Joselito Medina-Marin, Maria Guadalupe Serna-Diaz, Juan Carlos Seck-Tuoh-Mora, Norberto Hernandez-Romero, Irving Barragan-Vite</p> <p style="text-align: center;">Universidad Autónoma del Estado de Hidalgo e299759@uaeh.edu.mx, medina@uaeh.edu.mx, aria_serna10342@uaeh.edu.mx, seck@uaeh.edu.mx, hromero@uaeh.edu.mx, rvingb@uaeh.edu.mx</p> <p style="text-align: center;">ABSTRACT</p> <p>This study proposes the use of graphical and mathematical representation of Petri nets in order to be trained as an Artificial Neural Network. The result is an extended Petri net model, named Neural Petri Net (NPN), which provides basic structures to create Petri net models with learning capabilities. The proposed algorithm is an adaptation of the known backpropagation algorithm, and the incidence matrix and state equation of Petri nets are used to calculate the output value of the trained NPN.</p> <p>Keywords: Petri nets, artificial neural networks, backpropagation, incidence matrix, state equation.</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

65	<p style="text-align: center;">FI-CO case Finance controlling module's position in the information system : SAP-SI Management</p> <p style="text-align: center;">Sara DEHBI¹, Anass SEBBAR²</p> <p style="text-align: center;">¹EMAA Business School, ERC, Agadir, Morocco s.dehbi@emaa.ma</p> <p style="text-align: center;">²International University of Rabat, TICLAB, Morocco ENSIAS, Mohammed V University, ESIN, Rabat, Morocco anass.sebbar@uir.ac.ma</p> <p style="text-align: center;">ABSTRACT</p> <p>Recent innovations require investments in information systems IS, which are increasingly being viewed as strategic weapons. Organizations must account for this change in their decision-making and management rationale. For management controllers, information technology has evolved into a valuable instrument. They have become an important source of assistance for the organization's development, particularly SAP, which is the market leader in IS. The goal of this paper is to examine the evolution of the information system and its strategic importance to the organization, as well as the positioning and purpose of the FI-CO finance, management control module in the SAP information system.</p> <p>Keywords: Management control, information system, SAP, FI-CO, positioning,</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

71	<p style="text-align: center;">Iterated Local Search for Determining the optimal Configuration in Artificial Neural Networks</p> <p style="text-align: center;">Joselito Medina-Marin, Maria Guadalupe Serna-Diaz, Alejandro Tellez-Jurado, Juan Carlos Seck-Tuoh-Mora, Norberto Hernandez-Romero, Samuel Medina-Garcia</p> <p style="text-align: center;">Universidad Autónoma del Estado de Hidalgo jmedina@uaeh.edu.mx, maria_serna10342@uaeh.edu.mx, tejual@hotmail.com, jseck@uaeh.edu.mx, nhromero@uaeh.edu.mx, me429457@uaeh.edu.mx</p> <p style="text-align: center;">ABSTRACT</p> <p>One of the challenges in Artificial Neural Networks development is to find the correct topology of the network with the best performance. In this paper, we propose the use of the Iterated Local Search algorithm to obtain an adequate configuration for the topology of Artificial Neural Networks. This proposal was tested with data gathered from a biotechnological experiment to obtain lignosulfonates in barley straw. In twenty iterations or less, the algorithm gets topologies for ANNs with r^2 near to one.</p> <p>Keywords: Artificial neural networks, Iterated Local Search, Optimization.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

74	<div data-bbox="449 405 1380 514" data-label="Section-Header"> <h3>Comparative study of computer security methodologies for countering cyber attacks</h3> </div> <div data-bbox="467 579 1362 653" data-label="Text"> <p>Francisco Manuel Hilario Falcón, Milner David Liendo Arévalo, Giancarlo Sanchez Atuncar, Ivan Crispin Sanchez</p> </div> <div data-bbox="659 653 1167 688" data-label="Text"> <p>Universidad César Vallejo, Lima, Perú</p> </div> <div data-bbox="532 688 1297 726" data-label="Text"> <p>fhilariof@ucvvirtual.edu.pe, mliendoa@ucvvirtual.edu.pe,</p> </div> <div data-bbox="532 726 1299 762" data-label="Text"> <p>gsanchezat@ucvvirtual.edu.pe, icrispin@ucvvirtual.edu.pe</p> </div> <div data-bbox="820 800 1006 831" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="407 833 1429 1564" data-label="Text"> <p>Nowadays, computer security ensures the absence of risks in any of the elements of a system such as hardware, software, computer-human resources, networks, users, data, and procedures, interrupting that any user or personnel without authorization can have access to the information contained in the system and avoiding modifying, damaging, altering, eliminating and/or giving it any treatment that is not authorized. That is why large organizations or IT researchers developed methodologies ((a) ISSAF Methodology, (b) OSSTMM Methodology, and (c) OWASP Methodology) that were implemented in different organizational environments and were effective in countering anomalies and cyber-attacks. Therefore, the objective of the present research is the comparison of computer security methodologies to counter cyber-attacks with the following criteria: Year of inception, Country of development, definition, characteristics, method, phases, benefits. These criteria were fundamental to compare the information of each development methodology presented to evaluate their functions and classify which one is more efficient to avoid some anomalies in an entity. As a recommendation, it is proposed to continue developing this research in different variables of evaluation based on the methodologies of computer security that help to encourage students to develop scientific articles based on computer security, information security, and mong others.</p> </div> <div data-bbox="407 1602 1427 1673" data-label="Text"> <p>Keywords: OWASP, ISSAF, OSSTMM, computer security, computer auditing.</p> </div>
----	---

Abstract of Paper Accepted in RTCSE'2022

76	<p style="text-align: center;">Big Data Analytics Capabilities, Innovation and Organizational Culture: Systematic Literature Review and Future Research Agenda</p> <p style="text-align: center;">Sabra Munir^{*1}, Siti Zaleha Abdul Rasid², Muhammad Aamir³, Farrukh Jamil⁴, Ishfaq Ahmed⁵</p> <p style="text-align: center;">^{1,2}University of Technology Malaysia and ²University of Business and Technology, Jeddah, Saudi Arabia ³ Hailey College of Commerce, University of the Punjab, Pakistan ⁴FAST National University of Computer and Emerging Sciences, Pakistan ⁵ Hailey College of Commerce, University of the Punjab, Pakistan sabra_munir@hotmail.com</p> <p style="text-align: center;">ABSTRACT</p> <p>Big data analytics (BDA) have the power to modernize traditional ways of doing business. Nevertheless, the impact of BDA capabilities on a firm's innovation performance is still not fully understood. Innovation is a key part of the obtaining business value. Since there is very little research on how organizations need to change in order to leverage such innovations, and how business value can be obtained from them, a growing number of studies has been investigating and theorizing about the strategies and structures that might help firms acquire the capacity to continuously innovate by introducing new products with the help of Process Oriented Dynamic Capabilities (PODC). Most researchers explored the phenomenon of Big Data Analytics, from either a theoretical point of view or neglected intermediate and moderate factors, such as PODC, Organizational Culture. In this connection, the “dynamic” resource-based view of the firm identifies dynamic capabilities as the main source of sustainable competitive advantage in a changing competitive landscape. This research considers the resource-based view of the firm as well as the socio-materiality theory. Practical implications for top executives are also discussed. To this end, this research focuses on identifying the gaps in the existing literature as well as proposing the course of action which can be undertaken for empirical study.</p> <p>Keywords: BDA Capabilities (BDA Cap), Big Data, Process Oriented Dynamic Capabilities (PODC), Innovation, Organizational Culture (OC).</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

77	<p style="text-align: center;">An Essential Plant-Based Noise Absorption Measurement Concept for Machine Learning Data Pre-Processing in Environmental Studies</p> <p style="text-align: center;">Wahidah Hashim, Siti Mastura Jamaludin, Rajina M A Raj Mohamed Universiti Tenaga Nasional, Malaysia wahidah@uniten.edu.my, sitimastura9205@gmail.com, Rajina@uniten.edu.my</p> <p style="text-align: center;">ABSTRACT</p> <p>The noise level in Peninsular Malaysia has constantly remained within the range of 70 dBA to 71 dBA which is above the recommended range by WHO (50dBA - 55dBA). To control the noise intensity level, planting trees has seen as the most sustainable method to implement. However, the absorption properties of trees to absorb noise are different from one another. Three measurement methods of determining absorption coefficient such as Adrienne method, impedance tube and reverberation chamber are discussed are highlighted in this paper with associated analysis. The analysis such as common elements approach and complexity analysis are adopted and modified. The objective of these studies is to design and develop a measurement concept which can form a basic guidance for researchers, communities, town developers as well as landscaper. The proposed concept is based on system organization theory which is modified to suit the aim of the studies. The concept foundation lays important component structures which further evaluated by adding more elements in parallel to the advancement of information technology.</p> <p>Keywords: noise attenuation, vegetation, impedance tube, Adrienne method, system theories, common element, geographical mapping, plant, noise absorption</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

78	<p>Food Freshness Detection Using Machine Learning Classification</p> <p>Wahidah Hashim, Siti Mastura Jamaludin, Rajina M A Raj Mohamed Universiti Tenaga Nasional, Malaysia</p> <p>wahidah@uniten.edu.my, sitimastura9205@gmail.com, Rajina@uniten.edu.my</p> <p>ABSTRACT</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

82	<h3 style="text-align: center;">Control and Alert Mechanism of RFID Door Access Control System Using IOT</h3> <p>Haider Rasheed Abdulshaheed¹, Haider Hadi Abbas², Israa Al_Barazanchi³, Wahidah Hashim⁴, Ammar Ahmed Alkahtani⁵</p> <p>^{1,4} Computer Engineering Techniques Department, Baghdad College of Economic Sciences University, Baghdad - Iraq</p> <p>^{3,4} College of Computing and Informatics, Universiti Tenaga Nasional (UNITEN), Malaysia https://orcid.org/0000-0002-6798-6295</p> <p>² Computer Technology Engineering Department, Al-Mansour University College (MUC), Iraq, https://ORCID.org/0000-0002-0724-7829</p> <p>⁵ Institute of Sustainable Energy, Universiti Tenga Nasional, Kajang, 43000, Selangor, Malaysia</p> <p style="text-align: center;">ABSTRACT</p> <p>The RFID Door Access Control System has been providing security and reliability to many secure medical and scientific facilities, official grounds, and locker rooms with confidential files with access key provided for a limited number of people. This system is an advanced hybridized one incorporating multiple access methods with enhanced security, making it easier for members to access the door and impossible for those without the access keys. The system uses three access methods to open the door. 1. A basic RFID Key tag and RFID EM reader, for permanent members. 2. A temporary password that can be input using a keypad, for temporary workers. 3. Remote Door access by administrator using IOT technology, for guests and visitors for a onetime visit. The system uses NIST to track time and data log all the details on the web server, data gets registered whenever the door is used. The date and time at which the door is accessed and the name of the person accessing the door gets registered every single time the door is used. If the system identifies a false access method or an intrusion, the base gets alerted through WI-FI and the door will be permanently locked unless the secure system is reset using a special administrator password. The door lock is activated by means of high torque servo motors with vibration sensors. In case if someone tries to damage the locking system, it will be identified by the system using the vibration sensor and the system alerts the base and gets locked.</p> <p>Keywords: Automation, Security, RFID, Face detection, Smart door lock</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

94	<p style="text-align: center;">Linguistic Processor (Simplified) for Decision Support in the Computer Networks Testing</p> <p style="text-align: center;">Ademi Ospanova, Berik Tuleuov, Aizhan Zharkimbekova, Aizhan Tokkuliyeva, Bekzat Toksan</p> <p style="text-align: center;">L. N. Gumilyev Eurasian National University o.ademi111@gmail.com</p> <p style="text-align: center;">ABSTRACT</p> <p>An algorithm for intelligent processing of a limited language of a specialized program for testing the security of computer networks has been created. The algorithm filters the output of the program, analyzes the formal language of inference messages according to specific (technical) and linguistic criteria, generates interpreted messages without the use of specialized terms in the form of instructions, explanations and recommendations to ensure a timely response in urgent cases or to support decision- making in the process of testing and detection of vulnerabilities. Clustering a selected set of program messages establishes a correspondence between the compiled database of the utility's messages and the levels of vulnerabilities and risks (meeting the recommendations of the standards). This provides the implementation of an automatic assessment of the security level of a computer network. In addition, the resulting clustered base is used to create a method for linguistic language processing. To construct a (simplified) linguistic processor, the special concepts required to the formation of the knowledge base are introduced; examples are given. The processes in the operation of the presented algorithm are described in detail. The algorithm was created for the purpose of implementation in the developed software and hardware package for testing the security of computer networks by users who are not specialized experts in the field of network protection and testing. The algorithm is applicable for both private computer networks and networks of small and medium-sized businesses.</p> <p>Keywords: INTELLIGENT DATA PROCESSING, LINGUISTIC PROCESSOR, COMPUTER SECURITY, RISK ASSESSMENT, INTELLIGENT SYSTEM, RASPBERRY PI</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

97	<p style="text-align: center;">CONSUMER EMPOWERMENT IN THE DIGITAL MEDIA MARKETING AGE: A COMPARATIVE LITERATURE REVIEW AND TRENDS ACROSS SELECTED COUNTRIES</p> <p style="text-align: center;">Sanya Shahid, Jawaid A. Qureshi Shaheed Zulfikar Ali Bhutto Institute of Science & Technology (SZABIST), (Pakistan). sanya.shahid@szabist.pk, jawaid.qureshi@szabist.edu.pk</p> <p style="text-align: center;">ABSTRACT</p> <p>Globally, environment and consumer interactions are rapidly changing due to digital technologies and digital media marketing. The introduction of digital marketing and the complexities that it has wrought have led to a paradigm shift in the traditional marketing communication model. Traditional consumer dynamics have evolved drastically with new ways to promote, converse and connect with consumers supported by digital technologies. With the progression of new age digital marketing mediums communication practices have transformed and consumers have become empowered, which has led to a shift in the balance of power towards consumers. Consumer empowerment is considered as an integrated factor which promotes adoption of digital media as it allows a consumer to communicate and share views with others. With the increased user-generated content available online, there has been a shift of power from practitioners to consumers and as such it is an important factor in the adoption of digital media. This paper applied a semi-systematic comparative literature review about the elements of digital media through that lead to consumer empowerment in the context of Pakistan, and compare them with China, South Korea, and Mexico, which are the highest spending countries in digital advertising in 2021. It was found that in comparison with China and South Korea, Pakistani and Mexican brands and organizations were not well equipped to meet the multifaceted challenges of digital transformation.</p> <p>Keywords: Digital Media Marketing, Consumer Empowerment, Semi-systematic Literature Review.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

98	<p>The reasons for the weakness of dictation skills amongst non-Arab learners of Arabic language at Al- Imam Abdulrahman bin Faisal University, KSA</p> <p>Abdullah Ahmad R Aljenobi Asst. Prof. Dr., Faculty of Education. Al-Imam Abdulrahman Bin Faisal University, KSA araljenobei@iau.edu.sa</p> <p>ABSTRACT</p> <p>Teaching language, any language, aims at providing students with four basic skills in listening, speaking, reading, and writing, and to develop these skills so that they reach a linguistic level which enables them to use this language properly. It was noticed that dictation errors are still widespread in students' writings of Arabic texts, and these errors may prevent them from being properly understood when they communicate with others either in speech or in writing, and this weakness may be an obstacle for them to continue studying in the university, and may even affect their future chances to get a job, especially jobs based on Arabic writing skills. So, the lessons of dictation must take its adequate attention within the context of teaching Arabic for non-Arab learners. Teachers must know the effective strategies of teaching diction in order to get the best use of the lesson. This paper aims to find out the reasons that lead to weakness in this important skill, dictation, among non-Arabic speakers at Al-Imam Abdulrahman bin Faisal University.</p> <p>Keywords: Weakness of Dictation Skills, Non-Arab Learners, Arabic Language.</p>
----	---

Abstract of Paper Accepted in RTCSE'2022

99	<p style="text-align: center;">SOLID WASTE MANAGEMENT PROPOSAL FOR THE CONSTRUCTION PHASE OF THE SOUTHERN PERUVIAN GAS PIPELINE, SECTIONS B AND A1</p> <p style="text-align: center;">Rosangela Ricaldi Marcelo, Doris Esenarro , Susana Irene Davila Fernandez</p> <p style="text-align: center;">^{1,2,3}Federico Villarreal National University UNFV- Lima Peru ²Specialized Institute for Ecosystems and Natural Resources Research (INERN)-UNFV ^{1,2,3}Graduate School- EUPG- UNFV Peru ^{2,3}Ricardo Palma University-Peru rosangela.ricaldi@yahoo.com, desenarro@unfv.edu.pe, susana.davila@urp.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The objective of this thesis is to determine if proposed solid waste management for the construction phase of the pipeline south of Peru, Sections B and A1 will assist in the conservation of the environment, with the purpose of this proposal can be applied in other construction projects and so that they will succeed to be more friendly with the environment. The methodology was chosen for data collection waste personal interview to 227 people who work in the construction stage of the Pipeline South of Peru, Sections B and A1, whose questionnaire presents a model of Likert scale, giving the respondent the ease of being able to adjust their opinion to statements complex. Furthermore, the model used for the research is non-experimental with a type of correlational analysis. As a result, it was determined that the proposed solid waste management for the construction phase of the pipeline south of Peru, Sections B and A1, will assist in the conservation of the environment. This is due to the separation of solid waste, to the application of the three r's (reduce - recycle –refuse) to reduce the amount of waste brought to the landfill and give another use to the materials that serve even.</p> <p>Keywords: Environment, Solid Waste, Recycling, Improving the environment</p>
----	--

Abstract of Paper Accepted in RTCSE'2022

100	<div data-bbox="438 405 1396 569" data-label="Section-Header"> <h3>The Role of the Successful Manager in Qualifying Employees in Terms of Mental and Practical Terms</h3> </div> <div data-bbox="545 573 1287 613" data-label="Text"> <p>Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> </div> <div data-bbox="418 613 1421 646" data-label="Text"> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland</p> </div> <div data-bbox="787 644 1042 674" data-label="Text"> <p>Sha@shapadu.com.my</p> </div> <div data-bbox="418 672 1421 705" data-label="Text"> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland</p> </div> <div data-bbox="745 703 1086 735" data-label="Text"> <p>radzali.hassan@hartagroup.my</p> </div> <div data-bbox="418 732 1421 766" data-label="Text"> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland</p> </div> <div data-bbox="730 764 1101 795" data-label="Text"> <p>louis@alphainternational.com.my</p> </div> <div data-bbox="821 829 1006 863" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="410 865 1429 1652" data-label="Text"> <p>The manager has a very important role in the work environment and society in general, and we always hear about individuals who join and leave great and distinguished companies because of the manager. The main objective of this paper is to examine the relationship between managers and employee participation and what is the role of a successful manager at work. More specifically, the research addresses the shortcomings of the previous literature where employee performance has been narrowly controlled as a means of accomplishing only traditional tasks. While recent studies show that performance mediating factors such as employee participation constitute important roles for employee performance and organizational performance as well as the organization behavior. It can be affected more positively and effectively by paying attention to the sensitivity of the individual differences of employees in the same organization, which are ultimately motivated by the thoughts and actions of the surrounding environment, including the manager. The study takes a secondary approach to data collection to explore predictors of unconventional employee engagement in an organization due to positive manager performance. The analysis is also based on the study of online surveys from institutions around the world. The results of the research indicate that employee engagement is driven more by inherent employee traits than environmental factors as well as the way managers treat them.</p> </div> <div data-bbox="410 1673 1425 1753" data-label="Text"> <p>Keywords: Successful Manager, Employee Appraisal, Organization Behavior, Leadership, Human Resources.</p> </div>
-----	---

Abstract of Paper Accepted in RTCSE'2022

101	<div data-bbox="498 399 1331 510" data-label="Section-Header"> <h3>The Impact of Governance in Achieving Competitive Advantages</h3> </div> <div data-bbox="545 510 1284 550" data-label="Text"> <p>Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> </div> <div data-bbox="417 577 1414 642" data-label="Text"> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> </div> <div data-bbox="417 638 1414 703" data-label="Text"> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> </div> <div data-bbox="417 699 1414 764" data-label="Text"> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> </div> <div data-bbox="823 762 1006 795" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="410 800 1424 1392" data-label="Text"> <p>Governance occupied a great deal of interest from academics, practitioners, and regional and international organizations alike to the countries that provided it in solving the global crises that occurred in the countries of the world during the twentieth century. Then the interest in governance expanded after the repercussions of power and issues of corruption in the American economy in order to achieve economic growth automatically. The rules and principles of governance help institutions to efficiently manage their available resources and thus the ability to impose themselves in the market and their stability. So what are small and medium enterprises? Does governance contribute to improving the financial performance of small and medium enterprises? What are the obstacles that sound governance in small and medium enterprises may face? All these questions were addressed in this research. The results showed the importance of governance and the transparent application of its policies on the competitive advantage of companies, which is reflected in economic growth significantly.</p> </div> <div data-bbox="410 1413 1421 1491" data-label="Text"> <p>Keywords: Governance, Competitive Advantages, Small and Medium-Size Enterprises, Enterprise Rules and Principles, Economy.</p> </div>
-----	---

Abstract of Paper Accepted in RTCSE'2022

102	<div data-bbox="435 405 1395 598" data-label="Section-Header"> <h3>The Effect of Personal Relationships and Electronic Marketing On Maximizing Sales for 5-Star Hotels</h3> </div> <div data-bbox="544 663 1286 703" data-label="Text"> <p>Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> </div> <div data-bbox="417 741 1421 804" data-label="Text"> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> </div> <div data-bbox="417 802 1421 865" data-label="Text"> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> </div> <div data-bbox="417 863 1421 926" data-label="Text"> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> </div> <div data-bbox="821 926 1006 959" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="409 961 1427 1591" data-label="Text"> <p>The leftover marketing methods are one of the most important means of promoting sales of products or services, and this research aims to measure the effect of using Electronic Marketing (e-marketing) as well as public and personal relations in the process of promoting sales of hotels, especially high-level hotels, which are commercially known as five-star hotels. It has become a tangible reality that e-marketing via the Internet is a means to achieve the goals of organizations in terms of the huge numbers of users of this global network and with the increase in their number and knowledge of it day after day. The study relied on secondary sources from references and previous studies available on the Internet and related to the subject of the study. Then the descriptive analytical approach was used for these studies in order to reach the desired results. One of the most important of these results is to find a significant effect on the use of e-marketing to activate the sales process for high-level hotels, as well as the importance of personal and public relations in the marketing process for hotel services, but it is not as powerful as that which e-marketing provides, especially in terms of quantity.</p> </div> <div data-bbox="409 1612 1424 1690" data-label="Text"> <p>Keywords: Personal Relation effects, Public Relation, Electronic Marketing, Sales Enhancement, High-Level Hotels, Internet.</p> </div>
-----	---

Abstract of Paper Accepted in RTCSE'2022

103	<h3 style="text-align: center;">E-Government Towards Good Governance</h3> <p style="text-align: center;">Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> <p style="text-align: center;">ABSTRACT</p> <p>The advanced and renewable information and communications technology and its applications resulted in a new administrative reality whose manifestations were manifested in the emergence of e-government in its various forms, and the introduction of many changes and intellectual systems that were previously relied upon. In this regard, e-governance is a structure of functions and activities at the level of e-business on the one hand, and e-government business on the other, due to the strong interrelationship between them. And given that the size of the government sector constitutes a large percentage of the total economic sectors in most countries of the world, and given that the government sector is not limited to a particular category without others, but rather permeates all citizens, residents, institutions and their workers. Hence, the role of e-government emerged as an ideal means for the government to enable it to take care of the interests of the public from individuals and institutions electronically, without the need for the service applicant to move between government departments, and this requires reliance on governance mechanisms, that is, the good governance of the state to carry out effective management at the level of the state as a whole. In this paper, we will try to shed light on e-government and governance in order to highlight the role of strengthening governance in e-government.</p> <p>Keywords: E-Government, Good Governance, E-Business, Modern Technologies.</p>
-----	--

Abstract of Paper Accepted in RTCSE'2022

104	<p style="text-align: center;">The Impact of Modern Information Systems On Decision-Making Within Commercial Institutions</p> <p style="text-align: center;">Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> <p style="text-align: center;">ABSTRACT</p> <p>The issue of information systems is one of the most important topics that researchers are interested in, as it is a topic that is consistent with the requirements of the modern era, where the need for data and information collection and processing has increased, and its effective use has become a prerequisite for the success of organizations in their various forms in our time, especially commercial institutions, which is characterized by changes The continuous and complex environment, which has become mandatory for organizations to use information systems to benefit from them in making decisions related to all aspects of the organization. Through the foregoing, we will try in this research to assess the extent of the impact of the information system on commercial enterprises and knows the extent of their role in decision-making. The research found that the information systems in place in the trading company are of great importance in reaching the right decisions, as they provide the decision-maker with correct and accurate indicators at the lowest cost to continue working well and reach the set goals. The research also recommended a set of recommendations related to the design of information systems for each administration in commercial enterprises, which is required by the e-government project, taking advantage of the available experiences in this field. As well as paying attention to issues of confidentiality of information and protection from tampering, sabotage, theft, forgery and other issues of security and protection in automated information systems.</p> <p>Keywords: Decision-Making, Information Systems, Commercial Institutions, Management Information Systems.</p>
-----	--

Abstract of Paper Accepted in RTCSE'2022

105	<h3 style="text-align: center;">Impact of Crisis Management Strategies On the Development of Marketing Tasks</h3> <p style="text-align: center;">Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> <p style="text-align: center;">ABSTRACT</p> <p>Strategic planning is gaining everyone's attention at the present time, after it has proven its benefits and recommended to companies that planning is better than no planning, as today's world has become full of crises for reasons related to many changes that have occurred in the political, economic, demographic and environmental fields, and institutions and companies seek to overcome and manage these crises, in order to bring about basic developments, all of which require strategic planning represented in the means of crisis management. At the same time, marketing does not stop but rather adapts to emergency conditions and developments, hence the importance of the topic of "marketing in a time of crisis", especially since the whole world is affected by the Covid-19 epidemic, forcing marketers to develop new ways and develop those old methods that they were marketing, because of the desire to continue in business and the ability to reach customers. The aim of this research is to study the impact of modern crisis management strategies on the marketing performance of companies. The secondary data collection method was used to study and compare the research available online. The research also showed some results and recommendations, such as that the most important of which is the necessity of educating employees and involving them in developing the strategic plan and taking their views therein. Organizations should adopt strategic planning as a means and not as an end, as it increases the role of workers in crisis management. And the need for institutions to adopt strategic planning in their work, especially in the long term, and to make maximum use of available resources.</p> <p>Keywords: Crisis Management, Management Strategies, Marketing strategies, Covid-19, Companies Planning.</p>
-----	---

Abstract of Paper Accepted in RTCSE'2022

106	<p style="text-align: center;">The Evolution of Corporate Governance and Its Impact on Contemporary Management</p> <p style="text-align: center;">P. Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> <p style="text-align: center;">ABSTRACT</p> <p>Corporate governance is of great interest to companies and organizations at the regional and international levels, especially after the current economic crises that have led to a crisis of confidence in economic information. Hence, governance has become a fertile field for research and study. And the modern management represented in the economy and accounting to take advantage of its advantages and avoid its disadvantages, as the research helps in eliminating conflict and achieving harmony and balance between all the company's departments, in addition to tightening control over the company's management to prevent it from abusing its powers and providing transparency by using internal and external governance mechanisms. The research selects and analyses relevant scientific research to provide proposals that are compatible with the nature of the company, making it implement governance mechanisms. The research also found a close and positive correlation between governance mechanisms and the level of quality in the company's various departments.</p> <p>Keywords: Governance, Contemporary Management, Economics, Corporate Governance, Finance.</p>
-----	--

Abstract of Paper Accepted in RTCSE'2022

107	<div data-bbox="522 405 1305 529" data-label="Section-Header"> <h3>Corporate Governance Charters with Competitive Advantages</h3> </div> <div data-bbox="544 546 1286 583" data-label="Text"> <p>Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> </div> <div data-bbox="417 617 1421 678" data-label="Text"> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> </div> <div data-bbox="417 676 1421 739" data-label="Text"> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> </div> <div data-bbox="417 739 1421 802" data-label="Text"> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> </div> <div data-bbox="820 802 1006 833" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="409 837 1427 1346" data-label="Text"> <p>Corporate charters, which vest power in a network of control centres, can offer advantages for directors, shareholders, and other stakeholders. The author describes how he reduced the cost of capital through the establishment of a "Senate" as a watchdog board to improve investor and director protection. A cybernetic analysis is used to indicate how the involvement of customers, employees, and suppliers in corporate governance, as found in U.S., Europe, and Japan, can provide competitive advantages and improve self-regulation. A theory of firms, and organizations, based on economizing information processing by individuals are introduced to provide a common foundation for other theories. Cybernetic laws of requisite variety are presented as a basis for designing self-governing social institutions with operating advantages to minimize the role and cost of government while improving the quality of democracy.</p> </div> <div data-bbox="409 1369 1427 1446" data-label="Text"> <p>Keywords: Competitive Advantages, Corporate Charters, Cybernetic Laws, International Laws, Corporate Governance, Stakeholders, Shareholders.</p> </div>
-----	--

Abstract of Paper Accepted in RTCSE'2022

108	<h3 style="text-align: center;">Quality, Risk Management and Governance in International Enterprises</h3> <p style="text-align: center;">Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> <p style="text-align: center;">ABSTRACT</p> <p>Nowadays, international enterprises provide a number of distinctive features which make an interesting case for an in-depth review of risk management policies and practices in line with quality assurance standards. This paper considered corporate governance framework and practices relating to corporate risk management in international enterprises. Against the background of the risk and quality principles of corporate governance describes how various enterprises have chosen to implement the principles relating to quality risk management. The paper analyses the corporate governance framework and practices relating to corporate risk and quality management, in the private sector and in state-owned enterprises. It is based upon a general study of international enterprises. The paper finds that, while risk-taking is a fundamental driving force in business and entrepreneurship, the cost of risk management failures is still often underestimated, both externally and internally, including the cost in terms of management time needed to rectify the situation. Corporate governance should therefore ensure that risks are understood, managed, and, when appropriate, communicated. Currently, quality and risk governance standards tend to be very high-level, limiting their practical usefulness, and/or focus largely on international enterprises. There is scope to make risk governance standards more operational, without narrowing their flexibility to apply them to different companies and situations.</p> <p>Keywords: Governance Enterprises, International Enterprises, Quality Management, Enterprise Risk Management (ERM).</p>
-----	--

Abstract of Paper Accepted in RTCSE'2022

109	<p style="text-align: center;">The Impact of Human Resources Management in Preparing Strategic Plans</p> <p style="text-align: center;">Shafiz Shahrani¹, Radzali Hassan², Louis Adaikalam³</p> <p>¹Dr., International Institute of Applied Science of Swiss School of Management, Switzerland Sha@shapadu.com.my</p> <p>²Dr., International Institute of Applied Science of Swiss School of Management, Switzerland radzali.hassan@hartagroup.my</p> <p>³Dr., International Institute of Applied Science of Swiss School of Management, Switzerland louis@alphainternational.com.my</p> <p style="text-align: center;">ABSTRACT</p> <p>Contemporary organizations live in an era of interest in intellectual and cognitive maturity and are directed towards more studies and research on the importance of human resources for organizations, as the long steps taken by international organizations towards achieving strategic success. It came through the center of its strength and launch, which is the human resources that gave it all the possibilities and means that enable it to innovate and develop. No success can be achieved without taking care of human resources. Hence, the intellectual dilemma of this study dealt with the impact of human resources management in preparing strategic plans. The study arrived at a set of conclusions and recommendations result that all the relations of influence for human resources management strategies and strategic success were strong and significant moral as well as the significance of all this.</p> <p>Keywords: Human Resources, Strategic Plans, Modern Management.</p>
-----	---

Abstract of Paper Accepted in RTCSE'2022

110	<p style="text-align: center;">Assessment of pension systems in Peru, Chile, Brazil, Colombia, Netherlands, Denmark, Finland, Mexico, New Zealand, Africa, China, Japan, Spain, Sweden, Usa and Canada</p> <p style="text-align: center;">¹Jorge Rafael Diaz Dumont, ¹Dario Emiliano Medina Castro, ¹Alberto Valenzuela Muñoz, ²Jose Antonio Ogozi Auqui and ¹Gianmarco Garcia Curo</p> <p style="text-align: center;">¹National Autonomous University of Tayacaja Daniel Hernández Morillo, Perú</p> <p style="text-align: center;">²Federico Villarreal National University, Perú</p> <p style="text-align: center;">jorgediaz@unat.edu.pe, dariomedina@unat.edu.pe, albertomunoz@unat.edu.pe, 2021008037@unfv.edu.pe, gianmarcogarcia@unat.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>This article interprets the pension insurance procedures, considering that Peru has the following systems: the private pension system (AFP), in which workers receive the funds accumulated during their work as the national pension insurance (ONP) and the personal savings account, distributes the amount paid by the workers (mutual funds) and the retirees are canceled as a pension point. Taking into account the misinformation of pension insurance provided by public and private entities, it was decided to generate the correct information to achieve sufficient decision-making for each worker, because this choice is for the economic future of the worker. Also, a complete tour of the pension systems of Latin America, Europe, Asia.</p> <p>Keywords: Pension, evaluation and insurance systems, mutual funds.</p>
-----	---

Abstract of Paper Accepted in RTCSE'2022

111	<p style="text-align: center;">Hard and soft skills that a systems engineer must have to position within a company</p> <p style="text-align: center;">¹Jorge Rafael Diaz Dumont, ¹Dario Emiliano Medina Castro, ¹Alberto Valenzuela Muñoz, ²Jose Antonio Ogozi Auqui and ¹Gianmarco Garcia Curo</p> <p style="text-align: center;">¹National Autonomous University of Tayacaja Daniel Hernández Morillo, Perú ²Federico Villarreal National University, Perú jorgediaz@unat.edu.pe, dariomedina@unat.edu.pe, albertomunoz@unat.edu.pe, 2021008037@unfv.edu.pe, gianmarcogarcia@unat.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The development of education by competencies based on a systemic and complex approach is an urgent need in the development of Higher Education in general and in the case of the engineer in particular for the new paradigms and challenges of the Third Millennium with a Development approach Integral Human This work addresses engineering education with a complex approach and inquiring from key facts about competency training, a response to needs in education, where it is necessary to overcome fragmented intelligence with multidimensional and integrated visions. In particular, the vision of first-year civil engineering teachers on generic competencies of incoming students is analyzed.</p> <p>Keywords: Soft skills, Hard skills, technical studies, university studies, specializations.</p>
-----	---

Abstract of Paper Accepted in RTCSE'2022

112	<p style="text-align: center;">The integration of the agile SCRUM methodology and the ISO / IEC 12207 Standard</p> <p style="text-align: center;">¹Alberto Valenzuela Muñoz, ¹Dario Emiliano Medina Castro, ¹Jorge Rafael Diaz Dumont, ²Jose Antonio Ogoi Auqui and ¹Gianmarco Garcia Curo</p> <p style="text-align: center;">¹National Autonomous University of Tayacaja Daniel Hernández Morillo, Perú</p> <p style="text-align: center;">²Federico Villarreal National University, Perú albertomunoz@unat.edu.pe, dariomedina@unat.edu.pe, jorgediaz@unat.edu.pe, 2021008037@unfv.edu.pe, gianmarcogarcia@unat.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>Software engineering is a discipline that is still far from being understood, and a number of schools of thought and methodologies are emerging to try to capture and describe it. The ISO / IEC 12207 standard, for example, has tried to standardize the approach to software engineering since 1995. It must be borne in mind that this discipline is constantly evolving. For this reason, the standard is being revised for the first time since 2008. On the other hand, agile methodologies obtained great recognition in the world after the publication of the agile manifesto in 2001 software engineering after discovering that the classic methods of project management They are not ideal for Software Project Management, which are characterized by frequent changes in requirements, and subsequently the plan. In this article, we describe the integration between the Agile Scrum methodology and the ISO / IEC 12207 standard. As a result, it is intended to be a starting point for anyone interested in implementing Scrum or other agile concepts in a highly structured workplace.</p> <p>Keywords: Scrum, ISO / IEC 12207, agile.</p>
-----	--

Abstract of Paper Accepted in RTCSE'2022

113	<p style="text-align: center;">Technical considerations in the design of a fttb network to optimize internet service</p> <p>¹Dario Emiliano Medina Castro, ¹Gianmarco Garcia Curo, ¹Jorge Rafael Diaz Dumont, ¹Alberto Valenzuela Muñoz and ²Fernando Viterbo Sinche Crispin</p> <p>¹National Autonomous University of Tayacaja Daniel Hernández Morillo, Perú ²National University of Huancavelica, Perú</p> <p style="text-align: center;">dariomedina@unat.edu.pe, gianmarcogarcia@unat.edu.pe, jorgediaz@unat.edu.pe, albertomunoz@unat.edu.pe, fernandosinche@unh.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>In recent years we see that the world of networks and technology has been growing by leaps and bounds, for this reason the demand for internet access has increased. That is why we are in need of having better access to broadband service from the end user. Currently the internet service is based on coaxial cabling technologies or hybrid networks, these technologies present limitations that in the future will not be able to support network traffic. This article will describe the technical considerations, parameters that a FTTH network must have to optimize internet service to households that request this service. That is why a technology was considered that can allow us to reach most homes with the lowest implementation cost and respecting the technical regulations for the design of an FTTH network.</p> <p>Keywords: FTTH, Digital networks, GPON, Bandwidth.</p>
-----	---

Abstract of Paper Accepted in RTCSE'2022

114	<p style="text-align: center;">Spiral methodology of the software life cycle oriented to the advertising service applying ISO 12207</p> <p style="text-align: center;">¹Jorge Rafael Diaz Dumont, ¹Dario Emiliano Medina Castro, ¹Alberto Valenzuela Muñoz, ²Jose Antonio Ogozi Auqui, ¹Gianmarco Garcia Curo and ¹Jose Torres Huamaní</p> <p style="text-align: center;">¹National Autonomous University of Tayacaja Daniel Hernández Morillo, Perú</p> <p style="text-align: center;">² Technological University of Peru, Perú</p> <p style="text-align: center;">jorgediaz@unat.edu.pe, dariomedina@unat.edu.pe, albertomunoz@unat.edu.pe, c18793@utp.edu.pe, gianmarcogarcia@unat.edu.pe, josetorres@unat.edu.pe</p> <p style="text-align: center;">ABSTRACT</p> <p>The purpose of this work is to study the application of spiral methodology that advertising entities may use today, applying ISO 12207, obtaining as a result information from some institutions that already promote the use of this methodology, as well as the possibilities of implementation in institutions that have been stranded with regard to technological modernization in their institutions</p> <p>Keywords: Methodology, ISO 12207, State institutions, technological modernization.</p>
-----	--

Abstract of Paper Accepted in RTCSE'2022

116	<div data-bbox="423 331 1412 455" data-label="Section-Header"> <h3>Dhikr in Unison and its Impacts on the Spiritual Life in Malaysia</h3> </div> <div data-bbox="418 499 1421 657" data-label="Text"> <p>¹Mohammed Ebrahim El-Sherbiny Sakr, ²Ahmed Mahmoud Ahmed Mahmoud Abo Hassobah, ³Muhammad Fakhruddin Bin Ishak, ⁴Ahmad Effat Bin Mokhtar, ⁵Ainuddin bin Kamaruddin, ^{*6}Yousef A.Baker El-Ebiary</p> </div> <div data-bbox="423 674 1412 783" data-label="Text"> <p>^{1,2,3,4,5}Sultan Ahmad Shah Pahang Islamic University (UnIPSAS), Malaysia meesakr67@gmail.com, dr.abohassoba@yahoo.com, fakhruddin@kuipsas.edu.my, effat@kuipsas.edu.my, ainuddin@unipsas.edu.my</p> </div> <div data-bbox="440 779 1398 850" data-label="Text"> <p>^{*6}Assoc. Prof. Ts. Dr. Faculty of Informatics and Computing, UniSZA, Malaysia yousefelebiary@unisza.edu.my</p> </div> <div data-bbox="823 875 1008 911" data-label="Section-Header"> <h4>ABSTRACT</h4> </div> <div data-bbox="410 938 1430 1528" data-label="Text"> <p>There is no doubt that the science of Sufism became an essential part of our Islamic heritage, although it was not popularized as a term and concept until the third century AH. The science of Sufism focused on the spiritual aspect of the heart. The purification of the soul and the soul is the basis of the science of Sufism. Therefore, this aspect had a great impact on Islamic societies, especially Malaysian society. Who was affected by some mystical manifestations, such as wirts and remembrances, and other Islamic rituals, and passed on from generation to generation, and the persistence of it had an effect on the survival of Islam on the souls of the youth and the young, men and women, and it also had an evident effect on non-Muslims, who are many. They are destined to live among Muslims. Therefore, the primary objective of this study was: An observation of some Sufi manifestations that had a good effect in Malaysian society, and the preservation of these aspects that are the piety of hearts, as well as the rooting of these manifestations from the legal point of view and responding to the suspicions that were raised about them.</p> </div> <div data-bbox="410 1554 1109 1593" data-label="Text"> <p>Keywords: Dhikr in Unison, Spiritual Life, Malaysia</p> </div>
-----	---

Abstract of Paper Accepted in RTCSE'2022

146	<p style="text-align: center;">IMPLEMENTATION OF A MULTI-STANDARD INTEGRATED MANAGEMENT SYSTEM: ISO 27001, ISO 31000 AND ISO 22301 APPLIED TO PYMES</p> <p style="text-align: center;">Ulises Roman¹, Ulises Elguera², Luis Soto³, José Piedra⁴, Carlos Chavez⁵</p> <p style="text-align: center;">Faculty of Systems Engineering, UNMSM, LIMA-PERU</p> <p style="text-align: center;">nromanc@unmsm.edu.pe , ulises.elguera@unmsm.edu.pe , lsotos@unmsm.edu.pe, jpiedrasi@unmsm.edu.pe, cchavezh@unmsm.edu.pe,</p> <p style="text-align: center;">ABSTRACT</p> <p>In this article, an investigation based on the implementation of an Integrated Management System (SIG) in the established standards ISO 27001 and ISO 22301 applied to SMEs is presented. The fundamental problem that gives rise to this study lies in the fact that, despite the measures necessary by the organizations in terms of information security or in the continuity of their commercial activities, the effective integration of the Management System has not yet been established. Information Security System (ISMS) and the Business Continuity Management System (SGCN), due to this, a SIG has been proposed that unifies these standards in a normative way through Annex SL and in a practical way based on the process of the Risk Management System (SGR) which is based on the ISO 31000 standard. Through the PHVA methodology (Plan - Do - Verify - Act) the qualitative and quantitative approach based on continuous improvement is combined with which we can segment the requirements of each standard, avoiding duplication of documentation and guaranteeing the verification of compliance. Likewise, the result was the integration of multi-standard management systems in order to cover gaps related to information security and guarantee the recovery of PYMES from incidents that may interrupt their activity through risk management, trying to minimize the impact of potential threats. Despite not having the certification, there is a general compliance of approximately 45% in the implementation of its clauses.</p> <p>Keywords: PYMES, integrated system, risk management, information security, business continuity.</p>
-----	--

International Conference On Business, Management, Environmental, and Social Science (BMESS-2022)

<https://bmess.gyancity.com>

30-31 March 2022

**Bath Spa University UK, Academic Centre Rak Al
Khaimah, United Arab Emirates**

International Multi-Topic Conference on Engineering and Science (IMCES)

<https://imces.tech>

29-30 June 2022

Aalborg University, Esbjerg, Denmark

International Conference on Green Computing and Engineering Technologies (ICGCET®)

<https://icgcet.org>

22 - 23 September 2022

Shandrani Beachcomber, Mahebourg, Mauritius