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UNIVERSITAS ISLAM INDONESIA

ICITDA 2020

CERTIFICATE OF APPRECIATION

Awarded to

Adian Fatchur Rochim

as

PRESENTER

in the the 5th International Conference on Information Technology and Digital Applications (ICITDA) organized virtually by Department of Informatics, Universitas Islam Indonesia on November 13-14, 2020.

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A Citation Data Collector Tool of Author's Profiles in Scopus Based on Web and Application Programming Interface (API)

AF Rochim, TN Wijaya, D Eridani - IOP Conference Series …, 2021 - iopscience.iop.org

Improving the quality of publications will enhance teaching, support community service, and improve the campus reputation. One of the measurements of research quality can be observed by looking at the number of citations. The more research cited, the greater the effect it will have on other research. In addition, the publication of research results is used by most researchers in relation to the promotion of their academic positions. The position of the author in the research affects the weight value of his/her publication. At this time, no …

PREFACE

Welcome to the fifth ICITDA, November 2020. This year, the pandemic of Covid-19 is happening. That said, we all agreed that the learning process should not stop here. We witness that the pandemic yields some obstacles but also believe that it leads to other opportunities. We, therefore, with the very spirit of ICITDA, continue the endeavour by holding this year's ICITDA virtually.

We would take this opportunity to thank all of the people who made this conference possible, insya Allah, and the enthusiasm they bring to the atmosphere. This year we are happy to have 6 keynote speakers and 6 workshop speakers from 6 countries, to receive more than 180 paper submissions (among them 71 are accepted & presented) and to admit hundreds of participants, coming from 8 countries. We also thank the University and Department of Informatics for all of the support. Last but not least, I personally want to express my thanks to all of my teammates of the fifth ICITDA, for the hard--and sincere--work.

Finally, once again thank you for joining this conference, and we are looking forward to seeing you in the next ICITDA.

Best regards,

Ridho Rahmadi
On behalf of the 5th ICITDA's Committee

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Keynote Speeches

LEARNING CAUSAL REPRESENTATIONS AND USING THEM

Dr. Kun Zhang

Carnegie Mellon University, USA

RISE OF THE DIGITAL TWIN IN INDUSTRIAL IOT AND INDUSTRY 4.0: OPPORTUNITIES AND FUTURE ASPECTS

Dr. Noor Zaman Jhanjhi

Taylor's University, Malaysia

STRENGTHENING INFORMATION TECHNOLOGY ECOSYSTEMS IN HIGHER EDUCATION: LESSONS FROM THE FIELD

Prof. Fathul Wahid, PhD

Universitas Islam Indonesia, Indonesia

SYNERGISTIC COMBINATIONS FROM HIGH-THROUGHPUT DRUG SCREENING

Dr. Tjeerd Djikstra

Max Planck Institute for Developmental Biology, Tubingen, Germany

THE TRANSITION TO POST-QUANTUM CRYPTOGRAPHY: CHALLENGE AND CHANCE

Prof. Peter Schwabe

Radboud University, Nijmegen, the Netherlands

HOW TO MAKE MACHINE LEARNING WORKS IN INDUSTRY?

Elena Sokolva, Ph.D

Amazon

Table of contents

Volume 1077

2021

Previous issue Next issue

The 5th International Conference on Information Technology and Digital Applications (ICITDA 2020) 13th-14th November 2020, Yogyakarta, Indonesia

Accepted papers received: 27 January 2021
Published online: 15 March 2021

Open all abstracts

Preface

Papers

+ Open abstract View article PDF

OPEN ACCESS 012016

A Heuristic Load Balancing Algorithm for Cloud Computing in Heterogeneous Resource Environment

Bagus Jati Santoso, Ary Mazharuddin Shiddiqi and Raldo Kusuma

+ Open abstract View article PDF

OPEN ACCESS 012017

A Citation Data Collector Tool of Author's Profiles in Scopus Based on Web and Application Programming Interface (API)

Adian Fatchur Rochim, Tendi Nugeraha Wijaya and Dania Eridani

+ Open abstract View article PDF

OPEN ACCESS 012018

Analysis and Designing Enterprise Architecture of PT. Adigas Jaya Pratama on Sales and Service Function Using TOGAF Framework

Alfian Mulya Rachmandany, Rd. Lugina L. Utama, Muharman Lubis and Nia Ambarsari

+ Open abstract View article PDF

OPEN ACCESS 012019

Clustering with Principal Component Analysis and Fuzzy Subtractive Clustering Using Membership Function Exponential and Hamming Distance

Annisa Eka Haryati and Sugiyarto

+ Open abstract View article PDF

OPEN ACCESS 012020

Developing a framework for self-isolation app: a case study of Jakarta's COVID-19 mitigation

R Gultom, A Hirzirahim, Y Nugraha, Z Nursyufa, Hamdi and A L Suherman

+ Open abstract View article PDF

OPEN ACCESS 012021

Implementation of Socket Priority Module for Unmanned Aerial Vehicle Network using FlyNetSimulator

Jauzak Hussaini Windiatmaja, Johannes Calvin Tjahaja, Kgs. Al Amin and Riri Fitri Sari

+ Open abstract View article PDF

OPEN ACCESS 012022

The Implementation of User Centered Design Methods on Public Service Mapping Websites

Ginanjar Wiro Sasmito and M. Fikri Hidayattullah

+ Open abstract View article PDF

OPEN ACCESS 012023

Acquiring Commonsense Knowledge during Collaborative Storytelling

Jilyan Dy, Celina Brito, Vincent Tan, Julius Lola and Ethel Ong

+ Open abstract View article PDF

OPEN ACCESS 012024

Comparison between Butterworth Bandpass and Stationary Wavelet Transform Filter for Electroencephalography Signal

Xiaoxi Kang, Dini Oktarina Dwi Handayani and Hamwira Yaacob

+ Open abstract View article PDF

OPEN ACCESS 012025

Caren Pacol and Thelma Palaoag

+ Open abstract View article PDF

OPEN ACCESS 012045

Comparison of Main Algorithms in Big Data Analysis of Telecom Customer Retention

Yuanhu Gu, Thelma Domingo Palaoag and Josephine S. Dela Cruz

+ Open abstract View article PDF

OPEN ACCESS 012046

Lightweight Residual Network for Person Re-identification

Reza Fuad Rachmadi, Supeno Mardi Susiki Nugroho and I Ketut Eddy Purnama

+ Open abstract View article PDF

OPEN ACCESS 012047

Usability assessment of virtual reality as a training tool for oral presentation

M M Daniels

+ Open abstract View article PDF

OPEN ACCESS 012048

An Integrated Metamodel for Enterprise Architecture using Open Government Data Approach: A Conceptual Framework

Intan Maizura Arzimi, Nur Azaliah Abu Bakar, Mohd Naz'ri Mahrin, Mohd Nazri Kama and Surya Sumarni Hussein

+ Open abstract View article PDF

OPEN ACCESS 012049

Fingerprint Salt & Pepper Noisy Image Enhancement with Threshold Method

Mahmut Ince, Songfeng Lu, Saad Ali Alfadhli, Ismail Maulood and Shayem Saleh Alresheedi

+ Open abstract View article PDF

OPEN ACCESS 012050

Designing and Developing an Agricultural Product Sales Application Catalog with a Hybrid Application Development Framework

Argo Wibowo, Rosa Delima and C Antonius Rachmat

+ Open abstract View article PDF

OPEN ACCESS 012051

KaByahe: a mobile application focusing on the historical and cultural places within the city of manila

G M Cabrera, L P Caringal, J P Manocan, J G Senga and N Estrella

+ Open abstract View article PDF

OPEN ACCESS 012052

Random Effect Meta-Analytic Structural Equation Modeling (MASEM) Estimation Using The Method Of Moment: Case Study On The Poverty In The Island Of Java

R E Standsyah, B W Otok and A Suharsono

+ Open abstract View article PDF

OPEN ACCESS 012053

Ensemble convolutional neural network for robust batik classification

Yufis Azhar, Moch. Chamdani Mustaqim and Agus Eko Minarno

+ Open abstract View article PDF

A Citation Data Collector Tool of Author's Profiles in Scopus Based on Web and Application Programming Interface (API)

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Abstract. Improving the quality of publications will enhance teaching, support community service, and improve the campus reputation. One of the measurements of research quality can be observed by looking at the number of citations. The more research cited, the greater the effect it will have on other research. In addition, the publication of research results is used by most researchers in relation to the promotion of their academic positions. The position of the author in the research affects the weight value of his/her publication. At this time, no application can be used to classify the author's position of each publication produced. This paper aims to create an application that acted as a search engine to retrieve and collect researcher data along with a list of their publications from the Scopus database. The application uses a REST API or Web Service of Scopus. Web Service allows the integration of various systems with different platforms or architectures for sharing data and services. This application was built using the PHP and JavaScript programming languages. The application's development uses the Agile Software Development method. Users can also save the search results for the researcher data and researcher documents list in the MySQL database. Furthermore, this application also allows users to download the search result in their computer devices. The System Usability Scale (SUS) method was used to test the application's usability and gained 80 as the final score.

1. Introduction

Measuring the quality of research activities is essential to determine an impact on the development of science, technology, social, and economic[1]. Good quality research can also improve the development of teaching, support community service, and enhance the campus's reputation. In today's digital era, an alternative to measure a scholarly output of research can be observed by looking at a number of citations and papers of authors' papers. The more a paper cited, the influence of the research on science and technology development is even more significant[2]. Similarly, the publication of research results is used by most researchers concerning the promotion of academic positions. The most significant weight of publication results is when, in publication, the researcher is the main author.

To obtain research publication data, researchers can open the citation database or scientific journals, such as Google Scholar, Scopus, Crossref, Web of Science, and many more. In the previous research, researchers also used the web scraping and Application Programming Interface (API) method to obtain data[2][3][4]. The use of web scraping or API is quite complicated to analyze the research. Another study used as a reference in this paper is the creation of a search engine to search researcher profiles and research publications[5]. It used a web scraping method on other literature databases to collect data.

Developing a Framework on Predicting Evacuee Needs for Disaster Risk Reduction Management in the Province of Albay

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Abstract. An evacuee needs allocation framework wants to ease the predicting process on disaster preparedness in the province of Albay. The evacuee needs allocation framework will help the provincial government to identify and solve the problem of the current and manual process of the disaster management system in preparation down to the allocation of evacuee needs. An evacuation centre is a place that the Provincial Government provides basic human needs including food, water as well as accommodation during or before the disasters to the affected people. Detailed assessment was conducted by authorized personnel in the government organization to look at how to improve the chances of disaster victims with their stay in an evacuation centre. In this paper, the study aims to develop a framework that predicts the evacuee needs preparedness as well as the allocation needs on before and during the calamity to help and enhance the current process in the province of Albay. The researcher includes information technology tools such as RFID and GPS to the framework to enhance the efficiency and accuracy in the implementation of the needs allocation during the calamity in the evacuation centres. The paper will lead the provincial government of Albay in predicting the evacuee needs to insure a sufficient and avoid the shortage and excess of goods from the preparation down to the allocation in the evacuation centres and to help the Provincial Disaster Risk Reduction Management Council in allocating and monitoring of budgets for transparency purposes.

1. Introduction

Developing a framework on Predicting Evacuee needs wants to address that disaster has evolved through time into a complex policy subsystem, and disaster policy is enforced through a collection of functions referred as emergency management and response. In the modern technology, approaches in the disaster management involves its multidimensional efforts to reduce the vulnerability to hazards; to limit the effects of disasters; and to arrange for, respond to, and recover from the disaster occur.

Disaster readiness refers to do things or accomplish a purpose to get ready and lessen the effects of disasters. In the 2018 information of World Risk Report, the Philippines rank third among all of the nations worldwide which has very high in disaster risk, with index value of 25.14% [1]. The nation's total area of at least 60% is vulnerable to multiple threats or dangers, and 74% of the population is vulnerable to their impact [2]. The risk including coastal threats such as typhoons, tsunami and rising sea level is due to the location and geographical context of the country. Also, since the island is located within the "Ring of Fire" the people are seriously exposed to earthquakes and volcanic

An Integrated Metamodel for Enterprise Architecture using Open Government Data Approach: A Conceptual Framework

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Abstract. The government is always looking forward to providing citizens with excellent service. One of the government's significant agenda is to identify ways to improve the quality of service and deliver the best service to their citizens. Both Malaysia Open Government Data (MOGD) and Malaysia Government Enterprise Architecture (MyGovEA) initiative play a vital role in assisting the government in providing excellent service deliverables to the citizens. These domains must integrate each other towards the country's economic and social growth. In this paper, we propose the new conceptual model on a new metamodel for the OGD using the Government Enterprise Architecture (GEA) modeling process. Based on the OGD problem and challenges define map with the Archimate metamodel notation to classify the OGD context with the EA metamodel. The study becomes an opportunity for the MyGovEA team and the researchers to highlight EA integration across industry and agencies.

1. Introduction

The most significant of the government's agenda is always looking forward to providing an excellent service deliverable to the citizens. Recently, the innovation on re-strategized their National Information, Communication, and Technology (ICT) Agenda (NITA) by incorporating the EA initiative, strengthening the policy, standards, and practices in the context of ICT plays a vital role in empowering this agenda [1]. Government Enterprise Architecture (GEA) initiatives are the strategic management tool that helps to consolidate the development of business strategies [2]. Malaysian digital transformation and e-government programs require the integration between the agencies in the context of business and ICT towards achieving the agency's functionalities preparing the useful data and information for the decision-making to provide seamless services to the citizens and help the country economic and social growth.

Open Government Data (OGD) was part of Big Data initiatives that emerged globally with the intention of getting public data available to anyone as free and without restrictions [3][4]. Initially, OGD promoting government transparency and accountability but deep interest from the other sectors creates an opportunity for the country's economic growth [5]. The government now days are the biggest social entities with high data complexity. The rising data demand creates rapid data growth and contributes to the massive data management process [6]. Listed 'massive data collection effort and poor quality EA model data as the most frequently appeared [7].

Fingerprint Salt & Pepper Noisy Image Enhancement with Threshold Method

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Abstract. We present an adaptive threshold method for salt and pepper noisy fingerprint images. At first, we applied a threshold algorithm to detect noisy and corrupt pixels. Fingerprint image optimized with window filter produced pixels values. We measured the quality of the fingerprint images with peak signal to noise ratio and other efficient noise removing techniques were compared with it. The result shows improving performance of our method with remove salt and pepper noise from a fingerprint image. Our present work is useful to reduce or minimize medium level noise in fingerprint image. In future, we will work to reduce more than 80 percent noise level in fingerprint image.

Keywords: Salt-pepper noise, Image denoising, Adaptive threshold

1. Introduction

A fingerprint has become a more popular biometric recognition system due to permanency, easy implementation, small size sensor and affordable cost. Despite of these advantages, fingerprint identification and verification system have a challenge with low-quality fingerprint image and noise. The fingerprint images may have noise cause of low-quality images due to sensors, dust particles, oil, dryness, non-cooperated user [1-5].

Consequently, noise detection and noise filtering is still challenging in fingerprint image processing. Noise filtering techniques are important in the enhancement process effect fingerprint image quality, image quality effect fingerprint features and features affect biometric system accuracy. Previous literature proposed several nonlinear filters to remove unwanted effect as salt -pepper noise from fingerprint images [6-8]. As the median filter shows simple and efficient computational performance [9-10] but disadvantage of this filter is that they are efficient only in low noise density if fingerprint image includes high-density noise than some patches are visible and edge details will disappear [11]. Centre