Volume I, Issue 1, June 2018



Journal of Information Technology and Its Utilization





The Ministry of Communication and Informatics, Republic of Indonesia Human Resources Development and Research Agency BBPSDMP KOMINFO Makassar

Journal of Information Technology and its Utilization

Volume 1, Issue 1, 2018

Journal of Information Technology and Its Utilization is a journal published by the BBPSDMP Kominfo Makassar with the aim of disseminating information on scientific developments in information technology area and its utilization. The manuscript published in this journal is derived from research, scientific study conducted by researchers, academics and information technology expert. Publish with frequency of 2 times a year, namely in June and December.

PERSON IN CHARGE

Chief of Balai Besar Pengembangan SDM dan Penelitian Komunikasi dan Informatika Makassar

EDITORIAL BOARD

 Editor in Chief : Bahrawi, S.Kom, MT (Information System Technology, BBPSDMP Kominfo Makassar)
Section Editor : Mukhlis Amin, ST, MT (Information System Technology, BBPSDMP Kominfo Makassar) Herman, S.Kom, MT (Information System Technology, BBPSDMP Kominfo Makassar) Nur Alam, S.Kom (Information System Technology, BBPSDMP Kominfo Makassar)
Copy Editor : Darman Fauzan Dhahir, M.I.Kom (Applied Communication, BBPSDMP Kominfo Makassar)
Hermayadi, ST, MT (Information System Technology, BBPSDMP Kominfo Makassar)
Rudy Hermayadi, ST, MT (Information System Technology, BBPSDMP Kominfo Makassar)
Tasmil, S.Kom, MT (Information System Technology, BBPSDMP Kominfo Makassar)

MANAGING EDITOR

Chief Manager: Achmad Radil, SE, M.Adm.SDAStaff: Drs. Darsa Jaya Hedar, MAPDr. Faisal Risani, SE, M.Adm.SDA

REVIEWER

Dr. Ir. Zulfajri Basri Hasanuddin, M.Eng (Teknologi Informasi dan Komunikasi, Unhas) Irfan Syamsuddin, ST, M.Com. ISM, Ph.D (Teknologi Informasi dan Komunikasi, PNUP) Dr. Ahmad Nizar Hidayanto, M.Kom (Teknologi Informasi dan Komunikasi, UI) Dr. Ir. Rhiza, S. Sadjad, MSEE (Teknik Elektro, Unhas) Dr. Zulkifli Tahir, ST, M.Sc (Teknik Informatika, Unhas)

Address:

Balai Besar Pengembangan SDM dan Penelitian Komunikasi dan Informatika Makassar Jl. Prof. Abdurahman Basalamah II No 25 Makassar, 90234, Telp. 0411-4660370 Fax. 0411-4660084 http://jurnal.kominfo.go.id/index.php/jitu

Journal of Information Technology and it's Utilization

Volume 1, Issued. 1, 2018

TABLE OF CONTENTS

Decision Support Sistems (DSS) Determining Department Using Naive Bayesian Algorithm
Nurlindasari Tamsir, Samsu Alam
Utilization of Smartphone Devices and Use of Social Media in North Maluku
Bahrawi
Qur'an Memorizers and Internet: Study at Ma'had Khoirul-Kayyis and Ma'had Kutubussittah Babussalam in Makassar
Darman Fauzan Dhahir
Implementation of Authenticity and Nominal Money Detection Systems for Microcontroller-Based Blindness
Aprizal
Design Interactive Qur'an Learning for Kindergarten Based on Android
Thabrani R, Muh. Syahlan Natsir

Journal of Information Technology and it's Utilization

Volume 1, Issued 1, 2018

PREFACE

Bismillahirrahmanirrahim, Assalamualaikum wa Rahmatullah wa Barakatuh.

First of all, we wants to express his thanks to Allah SWT, because of His bless and grace, electronic scientific journal "Journal of Information Technology and Its Utilization (JITU)" can be finished and published in this year. JITU is semester international referred journal with the objectives to explore scientific developments in information technology area and its utilization. Published by BBPSDMP Kominfo Makassar, one of Balitbang SDM Kominfo-Ministry of communication and information units. This July is the first edition of JITU, with interesting topic papers like Decision Support Sistems (DSS) Determining Department Using Naive Bayesian Algorithm, Implementation of Authenticity and Nominal Money Detection Systems for Microcontroller-Based Blindness and many others.

Finally, we expects this edition can be a medium for the reader to develop and deepen the knowledge about information technology and its utilization. Look forward to our next edition in December 2018

July 2018 Editorial Team

Journal of Information Technology and its Utilization

Volume 1 Issued. 1, 2018

Keywords is extracted from paper. Abstract sheet may reproduced without permission and charge.

Nurlindasari Tamsir, Samsu Alam STMIK Dipanegara Makassar, Indonesia DECISION SUPPORT SISTEMS (DSS) DETERMINING DEPARTMENT USING NAIVE BAYESIAN ALGORITHM Journal of JITU Vol. 1 Issued, October 2018 page 1-8

Abstract - In practice the majors are often determined by the teacher with consideration of academic achievement and ignore the interests and talents of the students. Students who have high scores on the grades of report cards will be educated on IPA and low achievers will be led to IPS and Language. Problems faced by most schools because students who enter the majors are not in accordance with the skills, abilities, interests and talents of students that affect the quality and success of student learning. With the majors in accordance with the characteristics of personality, students will feel happy when learning so as to help prepare students to continue their studies and choose the world of work and help strengthen the achievements to be achieved in the future. The purpose of this study is to find out how the implementation of Decision Support Sistems (DSS) using the Naive Bayesian method in determining the department in accordance with the skills, abilities, interests and talents of students held in SMA Negeri 10 Makassar and SMA Islam Athirah Makassar. Technique of data retrieval is done by observation and direct interview. The instrument used is a validated questionnaire by 2 (two) validators to test the questionnaire validity. There are two types of data that are analyzed ie student value data and questionnaire data that generate interest and talent of students to determine the direction. It is expected that with this application it can be seen that the students go to the department has been in accordance with the potential of each student.

Keywords: Athirah, DSS, Naive Bayesian, SMAN 10

Bahrawi

Balai Besar Pengembangan Sumber daya Manusia dan Penelitian Komunikasi dan Informatika Makassar UTILIZATION OF SMARTPHONE DEVICES AND USE OF SOCIAL MEDIA IN NORTH MALUKU Journal of JITU Vol. 1 Issued, October 2018 page 9-14 **Abstract** - Basic guidelines. This document is itself an example of the desired layout (inclusive of this abstract) and can be used as a template. It contains information regarding desktop publishing format, type sizes, and typefaces. Style rules are provided that explains how to handle equations, units, figures, tables, abbreviations, and acronyms. Sections are also devoted to the preparation of acknowledgments, references, and authors' biographies. The abstract is limited to 150–200 words and cannot contain equations, figures, tables, or references. It should concisely state what was done, how it was done, principal results, and their significance.

Keywords: Utilization of Social Media; Smartphones; Technology Devices.

Darman Fauzan Dhahir

Balai Besar Pengembangan Sumber daya Manusia dan Penelitian Komunikasi dan Informatika Makassar QUR'AN MEMORIZERS AND INTERNET: STUDY AT MA'HAD KHOIRUL-KAYYIS AND MA'HAD KUTUBUSSITTAH BABUSSALAM IN MAKASSAR Journal of JITU Vol. 1 Issued, October 2018 page 15-21

Abstract – The Quran memorization is a highly recommended education in Islam. At the same time the internet has penetrated and become an irremovable part of all fields of human life, including santri life. Some are optimistic, but some are worried about the harm. The present study will discuss on how the internet utilized among Our 'an memorizers, and how it did affect to the achievement of each of them. It is different with the other scholars who have compared different groups of internet user and proposed contradictory conclusions. The surveys confirm that the Quran memorizers who have various techniques of memorizing, all aimed to utilize internet to increase the knowledge, but they are ultimately affected to use for social satisfactions and mere fun. Furthermore, the experiment has resulted that the increasing achievement has been performed during the internet banning, whereas the decrease happened at the access allowance.

Keywords: Applied communication; Internet effect; Internet utilization; Learning disruption; Quran memorization.

Aprizal

Sistem Informasi, STMIK Dipanegara Makassar, Indonesia IMPLEMENTATION OF AUTHENTICITY AND NOMINAL MONEY DETECTION SYSTEMS FOR MICROCONTROLLER-BASED BLINDNESS Journal of JITU Vol. 1 Issued, October 2018 page 22-25

Abstract - Nunukan Regency has geographical conditions that can prevent directly public services. Implementation of online public service can help government to reach community. However, the lack of telecommunication access, especially inaccessibility of users or the lack of BT capacity, is a major obstacle in the implementation of these service. Therefore, evaluation and planning of BTS requirement is needed in order to reach all users. The purpose of this research is to evaluate and plan the requirement of telecommunication tower in Nunukan Regency. This study used two methods in determining the BTS requirement by using the Standford University Interim (SUI) propagation model to determine the coverage area of telecommunication towers and using the calculation of BTS capacity to meet traffic requirements. The result obtained is the number of base stations which recorded are able to meet traffic requirements if it is assumed that all base stations which have been built are macro BTS with 3 sector antenna specification and the number of carriers 1 or 2, or micro BTS with 3 sectors antenna specification and the number of carriers 2. However, if it does not meet these specifications, it is necessary to increase the number of BTS based on BTS capacity for all sub-districts, except Krayan, Kraya Timur, Krayan Tengah and Krayan Barat.

Keywords: Base Tranceiver Station (BTS), public service, Standford University Interim (SUI), traffic requirement

Thabrani R, Muh. Syahlan Natsir

Informatics Engineering Study Program STMIK Dipanegara Makassar, Indonesia DESIGN INTERACTIVE QUR'AN LEARNING FOR KINDERGARTEN BASED ON ANDROID Journal of JITU Vol. 1 Issued, October 2018 page 26-31

Abstract-The Institute for the Development and Development of Al Qur'an Kindergarten (LPPTKA) in Sidrap city is an organization of the Indonesian Youth Mosque Youth Communication Agency (BKPRMI). LPPTKA BKPRMI Sidrap city is an educational institution that seeks to foster and develop the reading, writing, understanding and practicing the Qur'an through TKA / TPA units. As is known, basic religious education for early childhood is very important, where basic religious education special attention to children. The Qur'an Education Park (TPA) has become a forum for debriefing the basics of religion for children such as learning iqro', prayer, ablution and many more. The learning method used in most TPAs in Sidrap Regency still uses a general learning system such as using prayer books or iqra books so that students easily feel bored, especially when learning is very limited so that the knowledge gained is not maximal if they do not repeat home. By using an Android-based interactive learning application, it will provide a new way of learning and know technology to students so that it can increase the interest and quality of TK/TPA students in Sidrap district.

Keywords: Ablution; Android Application; Iqro '; Prayer; TK/TPA.