

The logo for JITU (Journal of Information Technology and Its Utilization) features the letters 'JITU' in a bold, blue, sans-serif font. The letters are stylized with a slight 3D effect, as if they are floating or have a shadow beneath them. The background is white with a light blue geometric shape in the top left corner.

Volume I, Issue 2, December 2018
e-ISSN: 2654-802X

The title 'Journal of Information Technology and Its Utilization' is displayed in a dark blue, sans-serif font. The text is centered within a large, light blue triangular shape that points downwards. The background of the entire cover is white with a large, light blue geometric shape that resembles a stylized arrow or a large triangle pointing downwards.

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 2, 2018

e-ISSN: 2654-802X

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)

Layout Editor : Rudy Hermayadi, ST, MT (Information System Technology, BBPSDMP Kominfo Makassar)

Proofreader : Tasmil, S.Kom, MT (Information System Technology, BBPSDMP Kominfo Makassar)

MANAGING EDITOR

Chief Manager : Achmad Radil, SE, M.Adm.SDA

Staff : Drs. Darsa Jaya Hedar, MAP

Dr. 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. 2, 2018

TABLE OF CONTENTS

ICT for Rural Area Development in Indonesia: A Literature Review Mukhlis Amin	32 - 37
News Topic Classification on Tribunnews Online Media using K-Nearest Neighbor Algorithm Herman	38 - 42
Implementation of Generalized Vector Space Model Method at Automatic Assessment of Online Essay Exam Muhammad Arafah, Pasnur, Fahmi Idrus	43 - 48
Smart Government Monitoring Population Administration in Gattareng Toa Village, Marioriwawo Subdistrict, Soppeng District Tasmil	49 - 53
Integration of Mobile Based Queuing Systems Nur Alam	54 - 61

Journal of Information Technology and it's Utilization

Volume 1 Issued. 2, 2018

PREFACE

Dear Readers,

Thank to Almighty God Allah SWT, we all pleased to present the latest issue of the Journal of Information Technology and Its Utilization. In the current issue, we publish the results of the latest research from the fields of Information Technology. The introductory article is entitled “ ICT For Rural area Development in Indonesia: A Literature Review”. It is written by a researcher from BBPSDMP Kominfo Makassar specialist in big data, Artificial Intelligence and Signal and Image Processing – Mukhlis Amin, The paper presents selected issues relating to the utilization of information technology for rural area in Indonesia. I hope the paper attractive to all our readers.

There are several other scientific articles in this issue, like Implementation Of Generalized Vector Space Model Method at Automatic Assessment of Online Essay Exam, News Topic Classification on Tribunnews Online Media Using K-Nearest Neighbor Algorithm, etc.

I would like to take this opportunity to encourage authors from around the world to publish their research results in the Scientific Journals of the BBPSDMP Kominfo Makassar. All readers are invited to visit our website. This link <https://jurnal.kominfo.go.id/index.php/jitu/index> will grant you access to electronic versions of the current and archival issues of this journal.

Finally, we hopes suggestions from the reader to be better in our issue in every edition. See you later in the next issue.

December 2018
Editorial Team

Journal of Information Technology and its Utilization

Volume 1 Issued. 2, 2018

e-ISSN: 2654-802X

Keywords is extracted from paper.

Abstract sheet may reproduced without permission and charge.

Mukhlis Amin

Balai Besar Pengembangan Sumber daya Manusia dan Penelitian Komunikasi dan Informatika Makassar

ICT FOR RURAL AREA DEVELOPMENT IN INDONESIA: A LITERATURE REVIEW

Journal of JITU Vol. 1 Issued 2, October 2018

page 32-37

Abstract - This paper discusses ICTs for the development of rural areas of Indonesia that have been carried out. There were 37 papers related to ICT and rural area reviewed. The ICT model for development that is mostly carried out is telecenter models such as PLIK, MPLIK, Information Village and Integrated Broadband Village. The main problem faced by ICT for development is the problem of literacy, in addition to territorial problems. Both of these problems are challenges for ICTs for future development, especially in rural areas.

Keywords: e-literacy; ICT for Development; Mobile broadband; Rural area; Telecenter.

Herman

Balai Besar Pengembangan Sumber daya Manusia dan Penelitian Komunikasi dan Informatika Makassar

NEWS TOPIC CLASSIFICATION ON TRIBUNNEWS ONLINE MEDIA USING K-NEAREST NEIGHBOR ALGORITHM

Journal of JITU Vol. 1 Issued 2, December 2018

page 38-42

Abstract - Online media journalists like tribunnews journalists usually determine the news category when make news input. Unfortunately, often the topic submitted is not in accordance with what is expected by the editor. These errors will make it difficult for news searches by customers. To eliminate these errors, editors can be assisted by an application that able to classify topics. Thus, editors is no longer too dependent on journalist input. This study aims to design application that able to classify topics based on the texts contained in the news. The method used is the K-Nearest Neighbor algorithm. This design has produced a system that able to classify news topics automatically. To measure the accuracy of the application, several test were carried out by comparing between its results and the results of manual classification by the editor. The tests those carried out with several scenarios produce an accuracy rate of 82%.

Keywords: Classification; K-Nearest Neighbor; News category.

Muhammad Arafah, Pasnur, Fahmi Idrus

STMIK AKBA, Indonesia

IMPLEMENTATION OF GENERALIZED VECTOR SPACE MODEL METHOD AT AUTOMATIC ASSESSMENT OF ONLINE ESSAY EXAM

Journal of JITU Vol. 1 Issued 2, December 2018

page 43-48

Abstract - The aim of the study was to design and implement automatic testing of online essay examinations using the Generalized Vector Space Model (GVSM) method. This data is obtained through (1) Literature Study (2) Observation (3) Documentation. The results of this study indicate that the automatic scoring system with the GVSM weighting method and the cosine similarity calculation method have the accuracy of the assessment with an average of 66%.

Keywords: Automatic Assessment System; Cosine similarity; Essay online exam, Generalized Vector Space Model.

Tasmil

Balai Besar Pengembangan Sumber daya Manusia dan Penelitian Komunikasi dan Informatika Makassar

SMART GOVERNMENT MONITORING POPULATION ADMINISTRATION IN GATTARENG TOA VILLAGE, MARIORIWAWO SUBDISTRICT, SOPPENG DISTRICT

Journal of JITU Vol. 1 Issued 2, December 2018

page 49-53

Abstract - This study aims to design and apply smart government monitoring of population administration applied by using Hypertext Preprocessor (PHP), MySql and C# with online server in Gattareng Toa Village, Marioriwawo Subdistrict, Soppeng District. This data is obtained through (1) Field Research, (2) Research Library, and (3) Interview. Data were analyzed by pieces analysis. The results of the study indicated that the Smart Government Monitoring Population Administration can help the system of population administration work in monitoring Population Administration in Gattareng Toa Village, Marioriwawo Subdistrict, Soppeng District.

Keywords: Administration Monitoring; Mobile android based; Smart Government; Website.

Nur Alam

Balai Besar Pengembangan Sumber daya Manusia dan Penelitian Komunikasi dan Informatika Makassar

INTEGRATION OF MOBILE BASED QUEUING SYSTEMS

Journal of JITU Vol. 1 Issued 2, December 2018

page 54-61

Abstract - *The amount of time and energy that is wasted when people queueing for public services is a serious problem. More ever if the queueing done by busy or sick people. Due to the busyness, a person sometimes has to complete several matters at different places in short period of time. Therefore, we need a queueing system that is able to integrate all queueing services, so the public can do all queueing processes more comfortably without having to cram into a queue. In addition, by integrating all community of queueing services, someone can get the several services by only registering a single application. The working system of this application is to distribute information on service position and estimated waiting time. To design the system, a survey was carried out in several public service facilities in Makassar and Gowa Regency. Beside that, literature studies on similar papers were carried out. System planning, analysis and design were applied using the SDLC method. The results of this design is expected to be a model that can be used as an appropriate reference to implement integration of mobile-based online queueing systems.*

Keywords : *Design and analysis; Integration system; Queueing system; Mobile system; SDLC.*