EDITORIAL BOARD

Chief in Editor
Sujacka Retno, S.T., M.Kom, Universitas Malikussaleh

Section Editor
Rozzi Kesuma Dinata, S.T., M.Eng, Universitas Malikussaleh
Said Fadlan Anshari, S.Kom., M.Kom, Universitas Malikussaleh

Editor
Wahyu Fuadi, S.T., M.IT, Universitas Malikussaleh
Novia Hasdyna, S.T., M.Kom, Universitas Islam Kebangsaan Indonesia
Ahmad Ihsan, S.T., M.T, Universitas Samudra
Firma Sahrul Bahtiar, M.Eng, UIN Maulana Malik Ibrahim Malang
Diah Ayu Retnani Wulandari, S.T., M.Eng, Universitas Jember
Ummu Radyah, S.Kom., M.Eng, Universitas Nusa Mandiri

Assistant Editor
Kurniawati, S.Pd., M.A. Universitas Malikussaleh
Baringin Sianipar, S.Kom., M.Kom, STMIK Pelita Nusantara

Peer Reviewers
Prof. Dr. Muhammad Zarlis, M.Sc, Universitas Bina Nusantara
Prof. Dr. Syahril Efendi, M.IT, Universitas Sumatera Utara
Prof. Dr. Herman Mawengkang, Universitas Sumatera Utara
Prof. Dr. Dahlan Abdullah, S.T., M.Kom, Universitas Malikussaleh
Dr. Erna Budhiarti Nababan, M.IT, Universitas Sumatera Utara
Dr. Eng. Muhammad Fikry, S.Kom., M.Kom, Universitas Malikussaleh
Munirul Ula, S.T., M.Eng., Ph.D, Universitas Malikussaleh
Dr. Nurdin, S.Kom., M.Kom, Universitas Malikussaleh

Published by
Universitas Malikussaleh

Contact Person
Mail to: jacka@unimal.ac.id
ACKNOWLEDGEMENTS

We are delighted to present the third issue of the Journal of Advanced Computer Knowledge and Algorithms, Volume 1, Number 3, for the month of July 2024. This milestone would not have been possible without the dedicated efforts of numerous individuals and organizations.

First and foremost, we extend our sincere gratitude to the authors who have contributed their insightful research articles to this third edition. Your commitment to advancing computer knowledge and algorithms is truly commendable.

We would also like to express our appreciation to the peer reviewers who generously shared their expertise and provided constructive feedback to enhance the quality of the submitted manuscripts. Your invaluable contributions have played a pivotal role in maintaining the high standards of JACKA.

Furthermore, our heartfelt thanks go to the editorial board members for their tireless efforts in the review and selection process. Your commitment to ensuring the relevance and rigor of the journal has been instrumental in shaping the content of this issue.

Last but not least, we would like to thank our readers and the broader academic community for their interest in JACKA. Your support is crucial in establishing JACKA as a reputable platform for disseminating cutting-edge research in the field of computer knowledge and algorithms.

We are excited about the journey ahead and look forward to continuing to serve as a valuable resource for researchers and practitioners alike. Thank you for being a part of the JACKA community.

Sincerely,

[Sujacka Retno, S.T., M.Kom]
Editor-in-Chief
Journal of Advanced Computer Knowledge and Algorithms
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Editorial Board</td>
<td>i</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>ii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iii</td>
</tr>
<tr>
<td>Web Application Firewall (WAF) Design to Detect and Anticipate Hacking in Web-Based Applications</td>
<td>52-58</td>
</tr>
<tr>
<td>Muhammad Annas, Rizal Tjut Adek, Yesy Afrillia</td>
<td></td>
</tr>
<tr>
<td>Implementation of Finite State Automata Method in Text to Speech Conversion System</td>
<td>59-63</td>
</tr>
<tr>
<td>Rini Meiyanti, Cut Lika Mestika Sandy</td>
<td></td>
</tr>
<tr>
<td>Comparison of Chen’s Fuzzy Time Series and Triple Exponential Smoothing in Forecasting Drug Stocks at the Blang Cut Kuala Community Health Center</td>
<td>64-71</td>
</tr>
<tr>
<td>Salma Devi, Zara Yunizar, Sujacka Retno</td>
<td></td>
</tr>
<tr>
<td>Implementation of Tsukamoto Fuzzy Logic to Determine Sheep Livestock Population Based on Gender and Age Category in Aceh Tamiang Regency</td>
<td>72-78</td>
</tr>
<tr>
<td>Cut Agusniar, Raziatul Khaira, Rifki Ramadan</td>
<td></td>
</tr>
<tr>
<td>Virtual Private Cloud (VPC) &amp; Elastic Compute Cloud (EC2) with Remote Access Using PuTTY Terminal on Ubuntu in a Private PVN</td>
<td>79-83</td>
</tr>
<tr>
<td>Irwanda Syahputra, Rizalul Akram</td>
<td></td>
</tr>
</tbody>
</table>