BUKTI KORESPONDENSI JURNAL ITIJ – Vol.3,No.1,May2025

JUDUL

Optimization of the SRIKANDI E-Government System Using XGBoost-Based Classification and One-Class SVM Anomaly DetectionType

Fitri Damaryanti, Aji Supriyanto*

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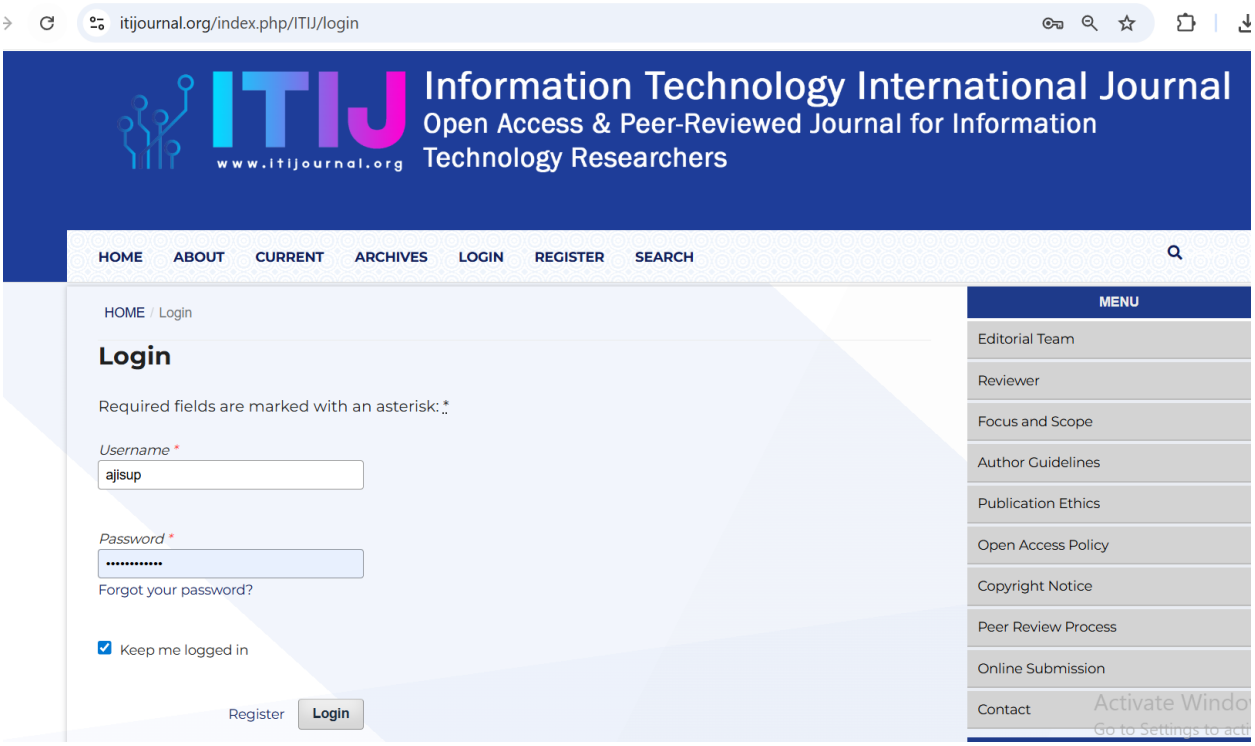

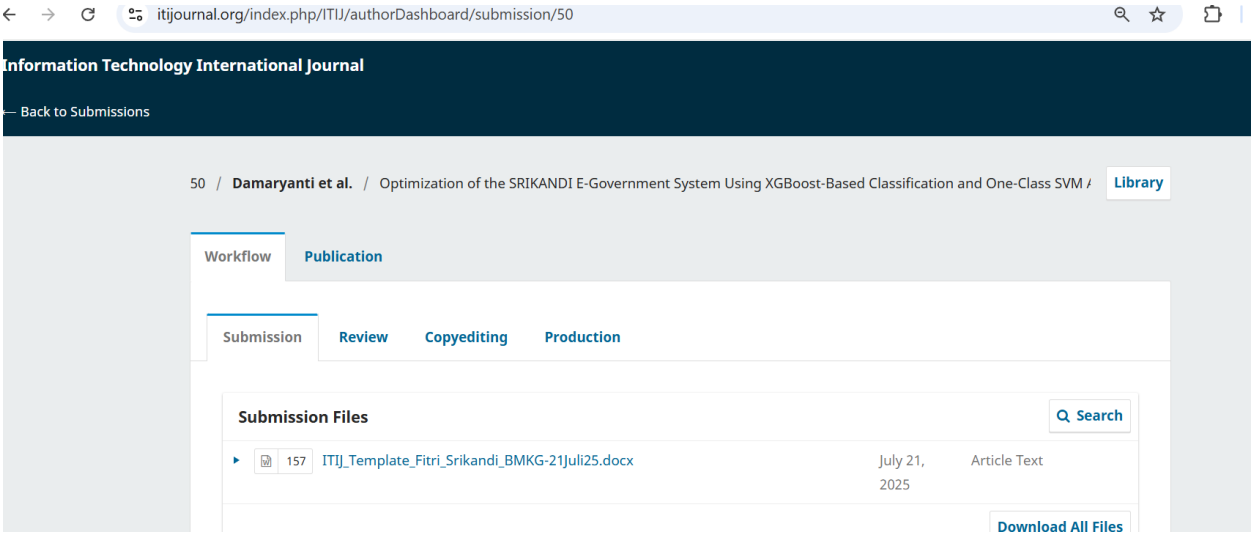
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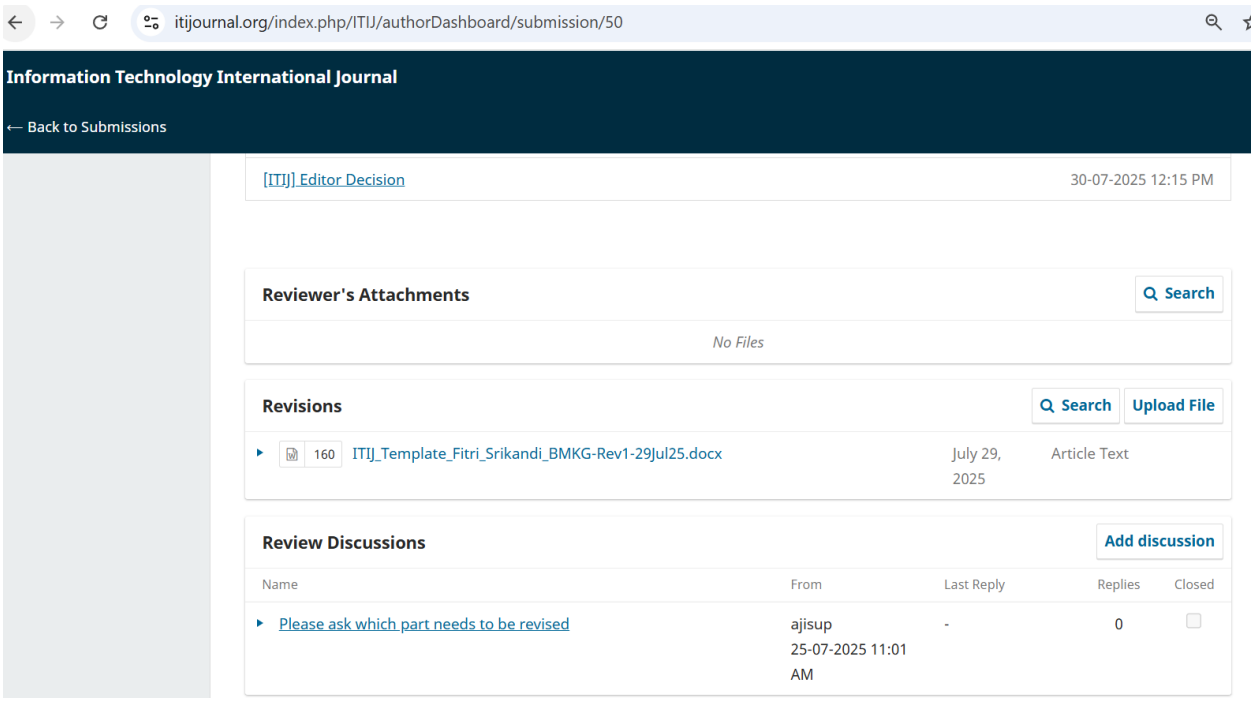
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[ITIJ] Submission Acknowledgement ([ITIJ] Ucapan Terima Kasih atas Pengajuan)

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Agussalim agussalim.si@upnjatim.ac.id lewat itijournal.org Sen, 21 Jul, 19.16
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Aji Supriyanto:

Thank you for submitting the manuscript, "Optimization of the SRIKANDI E-Government System Using XGBoost-Based Classification and One-Class SVM Anomaly DetectionType" to Information Technology International Journal. With the online journal management system that we are using, you will be able to track its progress through the editorial process by logging in to the journal web site:

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Aji Supriyanto:

We have reached a decision regarding your submission to Information Technology International Journal, "Optimization of the SRIKANDI E-Government System Using XGBoost-Based Classification and One-Class SVM Anomaly DetectionType".

Our decision is: Revisions Required

Aji Supriyanto <ajisup@edu.unisbank.ac.id> 25 Jul 2025, 18.09
kepada Eng

Dear Editor in Chief ITIJ

Based on the editorial team's decision, my journal draft, "Optimization of the SRIKANDI E-Government System Using XGBoost-Based Classification and One-Class SVM Anomaly Detection Type," requires revision. However, I haven't received details on what needs to be revised.

Please send us the details of the sections that need to be revised as soon as possible. Since I logged into the OJS system / https://itijournal.org/index.php/ITIJ/authorDashboard/submission/50#workflow I did not find the command for revisions.

Thank you.
Dr. Aji Supriyanto
(Corresponding Author)

[ITIJ] Editor Decision

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Sen, 28 Jul, 08.12

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Our decision is: Revisions Required

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29 Jul 2025, 07.31

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Please add more explanation regarding the results (it can be comparison with previous research or research implication)
Please add research limitation in conclusion
Please follow the template. There is inconsistency in font size or type
Please kindly send the revision two week after receiving this message so it can proceed to the review process and mark the revisions with red font.

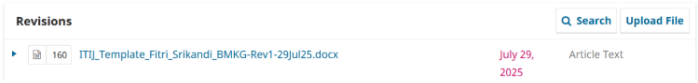
Best Regards,

Aji Supriyanto <ajisup@edu.unisbank.ac.id>
kepada Agussalim

Sel, 29 Jul, 13.26

Dear Chief Editor ITIJ
I've made revisions as requested by the reviewer and uploaded them to OJS. Please review and progress on this.
Thank you.

Correspondence Author
Dr. Aji Supriyanto



proactive management of digital records.

The implications of this study demonstrate that the integration of ML approaches, namely XGBoost and One-Class SVM, can contribute significantly to the automatic detection of input errors and potential data corruption. Furthermore, these methods improve the efficiency of metadata-based document classification, while supporting the interoperability and validity of electronic records management systems. Compared to previous research using the same algorithm, Rao's (2024)[23]

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study yielded better accuracy. This is due to the different case studies and the larger number of variables. Furthermore, a limitation of this study is the limited data available, as the case studies ranged from 2022 to 2025. Therefore, more data is needed.

4. Conclusion

The results of this study demonstrate that the XGBoost classification model exhibits

4. Conclusion

The results of this study demonstrate that the XGBoost classification model exhibits reasonably good performance in predicting the final status of archival records (i.e., *Musnah* vs. *Permanen*), achieving an accuracy of 77%, with the highest F1-score recorded for the "Musnah" category. However, performance on the "Permanen" class remains low, likely due to class imbalance in the dataset.Feature importance and SHAP analysis reveal that the most influential metadata attributes for classification are Number of Items, Active Retention Period, and Sub-Classification. This highlights the critical role of descriptive and temporal metadata attributes in determining archival retention status. The OCSVM anomaly detection model successfully identified 16 anomalous records (9.14%) out of 175 archival entries. These anomalies were typically characterized by abnormally high item counts, inconsistencies between retention duration and archival time span, and illogical or missing metadata entries—such as “No Document Available.” Furthermore, anomalies involving mismatches between creation dates and Digital Signatures (TTE) point to potential reliability issues in search, retention, and interoperability within the SRIKANDI archival system. The integration of XGBoost and One-Class SVM provides a robust framework for the systematic evaluation and validation of digital government archives, offering scalable support for improving data governance quality. The limitation of this research is that the data used is still limited, namely the SRIKANDI documents for 2022-2025, so the data for training and testing is still inadequate.

Based on the research findings, it is recommended to enhance archivist capacity through training on consistent metadata entry, implement data balancing techniques such as SMOTE to improve classification accuracy, and regularly apply anomaly detection models to support internal audits. Additionally, future development of the SRIKANDI system should integrate machine learning modules for metadata validation and classification recommendations. Lastly, an AI-based metadata cleansing system is needed to automatically detect and correct anomalies before documents are permanently stored in the digital archive.

[ITIJ] ICI Journals Master List 2024 - Publication of ICV assessment Results

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We would like to kindly inform you that the journal „Information Technology International Journal (ISSN: 3025-3152)" has passed the evaluation process positively and is indexed in the ICI Journals Master List database for 2024.

Based on the verification of information on the functioning of the journal in 2024, the value of its parametric strength (ICV indicator) was calculated.

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