



Rinta Kridalukmana <rintakrida@ce.undip.ac.id>

[JIKI] Submission Acknowledgement

Adila Alfa Krisnadhi <jiki@cs.ui.ac.id>
To: Mr Rinta Kridalukmana <rintakrida@ce.undip.ac.id>

Tue, May 30, 2023 at 1:28 PM

Mr Rinta Kridalukmana:

Thank you for submitting the manuscript, "A Dynamic-Bayesian-Network-Based Approach to Predict Immediate Future Action of an Intelligent Agent" to Jurnal Ilmu Komputer dan Informasi. 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:

Manuscript URL: <https://jiki.cs.ui.ac.id/index.php/jiki/authorDashboard/submission/1199>

Username: rintakrida

If you have any questions, please contact me. Thank you for considering this journal as a venue for your work.

Adila Alfa Krisnadhi



Rinta Kridalukmana <rintakrida@ce.undip.ac.id>

[JIKI] Editor Decision

Journal Administrator <jiki@cs.ui.ac.id>

Tue, Sep 5, 2023 at 10:47 PM

To: Rinta Kridalukmana <rintakrida@ce.undip.ac.id>, Dania Eridani <dania@ce.undip.ac.id>, Risma Septiana <rismaseptiana@live.undip.ac.id>

Dear Rinta Kridalukmana, Dania Eridani, Risma Septiana:

We have reached a decision regarding your submission to Jurnal Ilmu Komputer dan Informasi, "A Dynamic-Bayesian-Network-Based Approach to Predict Immediate Future Action of an Intelligent Agent".

Our decision: Major revisions

We can accept your paper if all the reviewers' concerns are adequately addressed. Please submit your revision through the system and email (in case you have trouble when submitting the revision through the system) before **17 September 2023**. To fasten the second round of the review process regarding your revision later, please attach the reviewer response form to explain how you address the reviewer comments/requests and merge them in the same file with your paper revision (please download the template from <https://docs.google.com/document/d/17TEIxI4bgMy-Alb36UDTptoXYvYKKsEy/>). Due to your paper will be reviewed again in the second round, please remember that your paper must still be blind (no author name and affiliation in the revised paper). If you have any problems or questions about the submission revision, please do not hesitate to contact us.

Journal Administrator
Faculty of Computer Science Universitas Indonesia
jiki@cs.ui.ac.id

Reviewer A:
Recommendation: Accept Submission

I. Reviewer's Confidence

Medium

II. Quality of The Article

1. Originality: How would you rate the originality of the paper?

Good

2. Significance of Topic: Is this topic gives significant contribution?

Good

3. Technical Quality: How would you rate the technical quality of this paper?

Good

4. Presentation: How would you rate the presentation (readability and organization) of this paper?

Good

5. Literature: Does the paper give complete literature review?

Adequate

6. Overall Rating: Do you recommend acceptance or rejection?

Weak Accept (+1)

III. Comment About the Paper

There are several terms or writing that are inconsistent, and please do a re-check again.

[From the attached review file]

1. Please do a re-check for the translation. Several sentences are wordy.
2. What kind of cases? Special cases, combinations, or those that have already been done? (Abstract, 5th Sentences)
3. What is "level four" term referring to? loop control? Please define. (Introduction, 2nd Paragraph)
4. The author can mention other studies that discuss the same thing, although there are a few, certainly there are. And the author can mention the difference between this research and what the author is doing at this time. (Introduction)
5. What about research that discusses collaborative driving context cases? Is there any? Maybe it can be mentioned too. (Related Works)
6. Is it possible to make the working scheme (flow chart) of the combination of methods proposed in this research? So that it is more visible where each output/result obtained is located. (Proposed Method, 3.2)
7. What are the outputs/results of the Naive method for the training and testing data? The author should explain it. (Proposed Method, 3.2)
8. What is DBC? (Proposed Method, 3.2.2)
9. What is the output/result of the DBN method for the data? It'll be better to explain a little. (Proposed Method, 3.2.2)
10. Is 67% accuracy good enough for the problem the author's describing? If so, what justifies it? If not, please mention other advantages besides accuracy that can be obtained from the proposed method. (Experiment and Results, 4.2.2)
11. Is there a comparison value? (Proposed Method, Table 7)
12. Is the comparison between the baseline method for the same problem as this study? Or are there different problems or experimental settings? Maybe the author can explain. (Table 7)
13. What is the interpretation of Figure 3 and Figure 4? What can be seeded for the results in this image (Figure 3)?
14. Where can I find the justification of the research results stated by this statement? (Conclusion) "Even though DBN has a good performance, it still depends on the accuracy of the classifier generated by the Naive Bayes."

 Reviewer B:
 Recommendation: Decline Submission

I. Reviewer's Confidence

Expert

II. Quality of The Article

1. Originality: How would you rate the originality of the paper?

Good

2. Significance of Topic: Is this topic gives significant contribution?

Inadequate

3. Technical Quality: How would you rate the technical quality of this paper?

Inadequate

4. Presentation: How would you rate the presentation (readability and organization) of this paper?

Excellent

5. Literature: Does the paper give complete literature review?

Adequate

6. Overall Rating: Do you recommend acceptance or rejection?

Weak Reject (-1)

III. Comment About the Paper

This study aimed to predict the immediate future action of IA using Naive Bayes (NB) and Dynamic Bayesian Network (DBN).

The proposed model was evaluated using an open-source autonomous car simulation software called Carla (version 9.13). The action classifier achieved an accuracy score of 98%. The action predictor achieved an accuracy score of 68% which highly depend on the action classifier's performance.

The main contribution of this study is the combination of NB and DBN to predict the immediate future action of an intelligent agent.

The authors need to provide an explanation on how the dataset is being split.

The authors should include K-fold cross-validation techniques to assess the generalizability of the proposed model. This would further strengthen the credibility of the findings.

From what I can catch, the authors try to visualize the prediction result of the action classifier against its label in Figure 1. However, the authors ended up using T-sne instead of the Confusion matrix. For that purpose, I highly encourage the authors to change Figure 1 into a Confusion matrix instead of T-sne.

This study lacks comparison in terms of model performance. The authors did compare the feature of their model against one of the previous method. However, it is still unclear whether or not the combination of NB and DBN is a good model since the author didn't compare their model against the previous model in term of performance. For that purpose, I highly encourage the authors to reimplement the previous method in the same environment and use the same random behavior and compare the result against the author's result.

Reviewer C:
Recommendation: Revisions Required

I. Reviewer's Confidence

High

II. Quality of The Article

1. Originality: How would you rate the originality of the paper?

Adequate

2. Significance of Topic: Is this topic gives significant contribution?

Adequate

3. Technical Quality: How would you rate the technical quality of this paper?

Good

4. Presentation: How would you rate the presentation (readability and organization) of this paper?

Good

5. Literature: Does the paper give complete literature review?

Adequate

6. Overall Rating: Do you recommend acceptance or rejection?

Weak Accept (+1)

III. Comment About the Paper


1. Anticipating the upcoming actions of an intelligent agent holds significant importance in human-autonomy teaming (HAT) as it improves human comprehension and response time, particularly in industrial and transportation domains.

2. The study focus on creating a methodology that utilizes machine learning, specifically naive Bayes for action classification, and Dynamic Bayesian Network (DBN) as an action predictor. The experimental scenario involves partially automated driving with the Carla simulation software.

3. The findings validate the effectiveness of the proposed approach in precisely predicting the immediate future actions of an intelligent agent within a three-second time span.

4. Based on the findings of the authors, this paper result should present and validate these claims :

- a. Future Prediction : What is the metrics and how its calculated ?
- b. Reason of actions : Quantitative measurements or qualitative ?
- c. Simplicity : Qualitative !
- d. Support missing : Should present the metrics quantitatively !
- e. Support uncertainties : Should present the metrics quantitatively !

 **A-1199.docx**
16K



Rinta Kridalukmana <rintakrida@ce.undip.ac.id>

[JIKI] Editor Decision

Journal Administrator <jiki@cs.ui.ac.id>

Wed, Sep 20, 2023 at 2:58 PM

To: Rinta Kridalukmana <rintakrida@ce.undip.ac.id>, Dania Eridani <dania@ce.undip.ac.id>, Risma Septiana <rismaseptiana@live.undip.ac.id>

Dear Rinta Kridalukmana, Dania Eridani, Risma Septiana:

We have reached a decision regarding your submission to Jurnal Ilmu Komputer dan Informasi, "A Dynamic-Bayesian-Network-Based Approach to Predict Immediate Future Action of an Intelligent Agent".

Our decision: Still Major Revisions

We can accept your paper if all the reviewers' concerns are adequately addressed. In this second revision, you must carefully address all reviewers' concerns. If your second revision still doesn't meet expectations, there will be a **high possibility of being rejected**. Please submit your revision through the system and email (in case you have trouble when submitting the revision through the system) before **5 October 2023**.

To speed up the next round of the review process regarding your revision later, please attach the reviewer response form to explain how you address the reviewer comments/requests and merge them in the same file with your paper revision (like you did in your first revision). Due to your paper being reviewed again in the third round, please remember that your paper must still be blind (no author name and affiliation in the revised paper). If you have any problems or questions about the submission revision, please do not hesitate to contact us.

Journal Administrator
Faculty of Computer Science Universitas Indonesia
jiki@cs.ui.ac.id

Reviewer A:
Recommendation: Decline Submission

I. Reviewer's Confidence

Expert

II. Quality of The Article

1. Originality: How would you rate the originality of the paper?

Adequate

2. Significance of Topic: Is this topic gives significant contribution?

Adequate

3. Technical Quality: How would you rate the technical quality of this paper?

Inadequate

4. Presentation: How would you rate the presentation (readability and organization) of this paper?

Good

5. Literature: Does the paper give complete literature review?

Good

6. Overall Rating: Do you recommend acceptance or rejection?

Reject (-2)

III. Comment About the Paper

Please make sure that your implementation is correct. In the context of K-fold cross-validation, if the author uses a K value of 5, the training and testing ratio will be 80:20 for training and testing respectively. Therefore, revision point 2 and point 1 is a contradiction. Moreover, implementing K-fold cross-validation using LeaveOneOut just doesn't make sense. LeaveOneOut is simply a K-fold validation in which the K value is equal to the total number of samples in the dataset. This too, contradicts the K-fold cross-validation with a K-value of 5. This is suspicious to me.



Rinta Kridalukmana <rintakrida@ce.undip.ac.id>

[JIKI] Editor Decision

Journal Administrator <jiki@cs.ui.ac.id>

Tue, Nov 7, 2023 at 9:45 PM

To: Rinta Kridalukmana <rintakrida@ce.undip.ac.id>, Dania Eridani <dania@ce.undip.ac.id>, Risma Septiana <rismaseptiana@live.undip.ac.id>

Dear Rinta Kridalukmana, Dania Eridani, Risma Septiana:

We glad to inform you that your last revision has been adequately addressed all review requests. We also have checked your paper on the plagiarism checker and we got that your paper passed our plagiarism rate criteria. Therefore, we can accept and publish your paper. For publication process, please send your final manuscript and do not forget to:

1. Add authors' names, affiliations, and emails.
2. Add an odd-page header by following the guidelines. If needed, please see JIKI's published paper in the previous issue for example on how to implement it.
3. Re-check and make sure that your paper fully fits the JIKI template.

Please re-revise your manuscript to fully fit the JIKI template and submit your final docx or LaTeX file version through the system and email (in case you face a problem when submitting it through the system) immediately before **14 November 2023** so that we can process your paper for publication in the nearest issue. Once you submit your final docx or LaTeX file that fully fits the JIKI template, we will send the acceptance notification. Please do not hesitate to contact us if you face a problem with this request.

Journal Administrator
Faculty of Computer Science Universitas Indonesia
jiki@cs.ui.ac.id

Reviewer A:
Recommendation: Accept Submission

I. Reviewer's Confidence

Expert

II. Quality of The Article

1. Originality: How would you rate the originality of the paper?

Adequate

2. Significance of Topic: Is this topic gives significant contribution?

Inadequate

3. Technical Quality: How would you rate the technical quality of this paper?

Adequate

4. Presentation: How would you rate the presentation (readability and organization) of this paper?

Adequate

5. Literature: Does the paper give complete literature review?

Adequate

6. Overall Rating: Do you recommend acceptance or rejection?

Weak Accept (+1)

III. Comment About the Paper

I am satisfied with the author's responses to my questions



Rinta Kridalukmana <rintakrida@ce.undip.ac.id>

[JIKI] Editor Decision

Journal Administrator <jiki@cs.ui.ac.id>

Sat, Nov 25, 2023 at 4:12 AM

To: Rinta Kridalukmana <rintakrida@ce.undip.ac.id>, Dania Eridani <dania@ce.undip.ac.id>, Risma Septiana <rismaseptiana@live.undip.ac.id>

Dear Rinta Kridalukmana, Dania Eridani, Risma Septiana:

We have reached a decision regarding your submission to Jurnal Ilmu Komputer dan Informasi, "A Dynamic-Bayesian-Network-Based Approach to Predict Immediate Future Action of an Intelligent Agent".

Our decision: Accept Submission

Please make sure you have included all co-authors in the system metadata and that your title and abstract in the system metadata are the same as your final manuscript. If you need to change the co-authors' order/data, title, and abstract in the system metadata, please contact us by replying to this email and we will change it for you.

Your paper will be published in JIKI Vol. 17(1) February 2024. Thank you very much for your great effort to publish your work in JIKI.

Journal Administrator
Faculty of Computer Science Universitas Indonesia
jiki@cs.ui.ac.id