Review Form

Paper ID	20211323
Paper Title	Handling Rating Sparse DMatrix for E-commerce Recommender System using Hybrid Deep Learning Based on LSTM, SDAE and Latent Factor

Recommendation for Publication	
☐(Evaluation A:) Accept	☐(Evaluation B:) Accept after Minor Revision
☐(Evaluation C:) Accept after Major Revision	☐(Evaluation D:) Reject

Comments from reviewers 1 & 2:

1. The authors should not use acronym without explanation. All acronyms must be defined before use. e.g. SDAE, LSTM, PMF, etc.
2. In abstract, the result of this work must be described briefly with data. The result of this work is not clear. The authors only described that "Following the experiment report involved in Movielens and Amazon Information Video dataset, our model outperformed previous models, with more than 5% in average using RMSE evaluation metrices". What do the "previous models" stand for?
3. To help readers' understanding, please add equation numbers to all equations.
4. The explanation about the mathematical formulas is not enough. Furthermore, the meaning of variables is not clear. Readers will be confused. To help readers' understanding, the authors should add a notation list.
5. Please unify the font style. In sentences and figures, mathematical expressions should be Italic font. (Some of them are Italic fonts and others are Roman font.) Otherwise, readers will be confused.
6. The problem definition of this work is not clear. In Sect. 1, the drawbacks of each conventional technique should be described clearly. The authors should emphasize the difference with other methods to clarify the position of this work further.
7. There are two Eq. (1).
8. "the representation of a activation function" Typo.
9. "the three gate include" Typo.
10. The presentation of figures is not professional. In figures, letters are too small. Enlarge or Redraw figures. e.g. see Fig. 5, 6, ...
11. Eq. (13) has editing problems.
12. The effectiveness of this work is not clear. Through simulations/experiments, the authors must justify the effectiveness of the proposed method by comparing with the other latest methods. Several articles are discussed in the research survey. However, no comparison is shown with these techniques. Frankly speaking, the research survey and References are meaningless. Please show comparison data.
13. There is no X-axis label in Fig. 7.

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1. Due to the lack of explanation, the reviewer fails to understand the meaning of some equations.
2. There are several problems in equation numbers and mathematical expressions. Besides, this seems a patch work of existing techniques.
3. The reviewer fails to understand the effectiveness of the proposed technique, because no comparison data is

shown in this paper. Please demonstrate the comparison data to confirm the validity of the obtained results. In-depth comparison and discussion are necessary to clarify the effectiveness. What's the relationship between the research survey and the comparison target? I cannot understand the meaning of the research survey.

4. Which articles did you compare with the proposed technique? Indicate the reference number in sentences. Besides, the authors must cite the compared articles in References.

5. Are there any more updated references, as the most newly one is in 2020, which needs to be updated?

From Editor:

Please add space (one line) around equations.

Please improve the reference format. This is very important for indexing service. If you did not follow the following format, your paper will be rejected automatically.

*Do not use "et al." in author names.

e.g.

[1] R. Ruskone, S. Airault, and O. Jamet, "Vehicle Detection on Aerial Images", *International Journal of Intelligent Engineering and Systems*, Vol.1, No.1, pp.123-456, 2009.

   (In the case of Journal Papers)

[2] R. Ruskone, L. Guigues, S. Airault, and O. Jamet, "Vehicle Detection on Aerial Images", In: *Proc. of International Conf. On Pattern Recognition*, Vienna, Austria, pp.900-904, 1996.

   (In the case of Conference Proceedings)

*Note: e.g. In the case of the author name:"John Doe", express as "J. Doe". ("John" is the first name and "Doe" is the family name.)

* * Please send your revised manuscript with the response letter for the 2nd review. (Please highlight modifications and additions inside the paper by red font.)

Please add "Conflicts of Interest" and "Author Contributions". (see the IJIES format.docx)

Conflicts of Interest (Mandatory)

Declare conflicts of interest or state "The authors declare no conflict of interest." Authors must identify and declare any personal circumstances or interest that may be perceived as inappropriately influencing the representation or interpretation of reported research results.

Author Contributions (Mandatory)

For research articles with several authors, a short paragraph specifying their individual contributions must be provided. The following statements should be used as follows: "conceptualization, XXX and YYY; methodology, XXX; software, XXX; validation, XXX, YYY, and ZZZ; formal analysis, XXX; investigation, XXX; resources, XXX; data curation, XXX; writing—original draft preparation, XXX; writing—review and editing, XXX; visualization, XXX; supervision, XXX; project administration, XXX; funding acquisition, YYY", etc. Authorship must be limited to those who have contributed substantially to the work reported.

Intelligent Networks and Systems Society

Review Form

Evaluation of Paper		

Contents	**Innovation**	□Highly Innovate □Sufficiently Innovate □Slightly Innovate □Not Novel
	Integrality	□Poor □Fair □Good □Outstanding
	Presentation	□Totally Accessible □Mostly Accessible □Partially Accessible □Inaccessible
	Technical depth	□Superficial □Suitable for the non-specialist □Appropriate for the generally knowledgeable individual working in the field □Suitable only for an expert
Presentation & English		□Satisfactory □Needs improvement □Poor
Overall organization		□Satisfactory □Could be improved □Poor