



Armin Lawi &lt;armin@unhas.ac.id&gt;

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**Your submission to Journal of Big Data - BIGD-D-21-00314**

1 message

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Reply-To: Journal of Big Data Editorial Office <shilpa.sreedharan@springer.com>  
To: Armin Lawi <armin@unhas.ac.id>

Wed, Jan 26, 2022 at 11:19 PM

BIGD-D-21-00314  
Implementation of Long Short-Term Memory and Gated Recurrent Units on Grouped Time-Series Data to Predict Stock Prices Accurately  
Armin Lawi; Hendra Mesra; Supri Amir  
Journal of Big Data

Dear Dr. Lawi,

Your manuscript 'Implementation of Long Short-Term Memory and Gated Recurrent Units on Grouped Time-Series Data to Predict Stock Prices Accurately' (BIGD-D-21-00314) has been assessed by our reviewers. Based on the advice received, the Editor feels that your manuscript could be considered for publication should you be prepared to incorporate major revisions. When preparing your revised manuscript, you are asked to carefully consider the reviewer comments which are attached, and submit a list of responses to the comments. Your list of responses should be uploaded as a file in addition to your revised manuscript.

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Reviewer reports:

Editors' comments ( if any ) :

Reviewer #1: with LSTM many existing works are there authors need explain how their approach is different from them The authors presented general information in this section. Besides, this section is a very important part of the book chapter and should have valuable aspects to include: Motivation, Significance/implication, challenges Result analysis need to explain clearly

Reviewer #3: #1) Authors have presented an interesting prediction model using LSTM and GRU Neural Network to forecast stock prices.

#2) Some typo errors need to be corrected.

#3) Min-Max normalization has been used. It is necessary to provide reasoning for this choice over other normalization techniques.

#4) In Section 3.1.3, a timestep size of 40 has been used. How the computational training time scales up with respect to the timestep size ? It is suggested to provide some discussion on how the timestep size of 40 is the optimal one.

#5) Authors conclude that accuracy of GRU algorithm is always superior to the LSTM. It is recommended to discuss training computational complexity of GRU vs LSTM.

#6) Authors have provided the data sources. For the benefit of interested readers, it is suggested to provide the url for gitlab (or other) repository of the code.

#7) It is recommended to provide a section on comparison of accuracy results with previous implementation studies.

#8) Fig. 7 Trained LSTM (dashed lines) and GRU (dotted lines) models is cluttered with too much data to digest. For better understanding, I would recommend splitting it into two figures - one with Actual and LSTM prediction and other with Actual and GRU prediction.

Reviewer #4: Authors have tested the existing algorithms with existing dataset in this work "Implementation of Long Short-Term Memory and Gated Recurrent Units on Grouped Time-Series Data to Predict Stock Prices Accurately". The following limitations and suggestions are recommended to authors for improvement of article.

1. Literature survey is limited, so suggested to do comprehensive literature survey to identify the gaps in stock predictions existing approach.
2. In Figure 1, the flow of lines between processing and post processing needs correction. After training of the model, the knowledge acquired by the model is used to evaluate the test data. But flow appears in different context.
3. No novelty in the proposed model, only used existing algorithms. Authors suggested to evolve some model for improved performance.
4. LSTM and GRU well established concepts, again explaining in detail with equations may not be required.
5. Comparative studies with baseline algorithms and results discussion on improvements needs to be strengthened.

Reviewer #5: The manuscript focuses at recommended system at stock prices  
The dataset used is till 2017 only looks 5 years old  
Recent data needs to be used for these types of study  
Do share the innovative outcome out of this study

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Armin Lawi &lt;armin@unhas.ac.id&gt;

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**Decision on your Submission to Journal of Big Data - BIGD-D-21-00314R1 - [EMID:93bd06611fbd7c9e]**

1 message

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Tue, Mar 29, 2022 at 4:44 AM

Reply-To: Journal of Big Data Editorial Office &lt;sathish.venkatesan@springernature.com&gt;

To: Armin Lawi &lt;armin@unhas.ac.id&gt;

BIGD-D-21-00314R1

Implementation of Long Short-Term Memory and Gated Recurrent Units on Grouped Time-Series Data to Predict Stock Prices Accurately

Armin Lawi; Hendra Mesra; Supri Amir

Journal of Big Data

Dear Dr. Lawi,

I am pleased to inform you that your manuscript "Implementation of Long Short-Term Memory and Gated Recurrent Units on Grouped Time-Series Data to Predict Stock Prices Accurately" (BIGD-D-21-00314R1) has been accepted for publication in Journal of Big Data.

Before publication, our production team will check the format of your manuscript to ensure that it conforms to the standards of the journal. They will be in touch shortly to request any necessary changes, or to confirm that none are needed.

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Any final comments from our reviewers or editors can be found, below. Please quote your manuscript number, BIGD-D-21-00314R1, when inquiring about this submission.

We look forward to publishing your manuscript and I hope you will consider Journal of Big Data again in the future.

Best wishes,

Borko Furht

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Editors' comments ( if any ) :

Reviewer #1: author addressed all review comments

Reviewer #3: All my review comments have been addressed. The manuscript has improved a lot.

Reviewer #4: Authors have not revised the manuscript as per the suggestions. There is no novelty or new knowledge presented in the article.

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To: "armin@unhas.ac.id" <armin@unhas.ac.id>  
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Fri, May 27, 2022 at 8:10 PM

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