# Article information:

SOH prediction for Lithium-Ion batteries by using historical state and future load information with an AM-seq2seq model - ScienceDirect  
<https://wvpn.qust.edu.cn/https/77726476706e69737468656265737421e7e056d234336155700b8ca891472636a6d29e640e/science/article/pii/S0306261923001575>

# Article summary:

1. A new multisource seq2seq model is developed for SOH prediction that takes both historical state information and future load information as inputs.

2. The proposed AM-seq2seq model is capable of providing accurate long-term SOH predictions for batteries under different future loads and beginnings of prediction (BOPs).

3. The proposed model exhibits great robustness against various historical state input and future load input lengths.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article provides a detailed overview of the development of a new multisource seq2seq model for SOH prediction, which takes both historical state information and future load information as inputs. The article also presents two case studies to validate the proposed AM-seq2seq model, showing its capability to provide accurate long-term SOH predictions for batteries under different future loads and beginnings of prediction (BOPs). Furthermore, the article demonstrates the robustness of the proposed model against various historical state input and future load input lengths.

In terms of trustworthiness and reliability, the article appears to be well researched and comprehensive in its coverage of the topic. It provides a clear explanation of the development process, validation results, and advantages of the proposed AM-seq2seq model. Moreover, it cites relevant literature to support its claims throughout the text. However, there are some potential biases in the article that should be noted. For example, while it does mention some existing data-driven methods for SOH prediction, it does not provide an exhaustive list or comparison between them and the proposed method. Additionally, while it does discuss potential risks associated with lithium-ion batteries such as operation non-availability or catastrophic safety issues due to performance degradation, it does not explore counterarguments or alternative solutions to these risks in detail. Finally, while it mentions that empirical models require a large amount of historical SOH fading data for every battery to individualize their parameters accurately, it does not provide any evidence or further discussion on this point.

In conclusion, overall this article appears to be reliable in terms of its research content but could benefit from more comprehensive coverage on certain points such as potential biases or counterarguments related to lithium-ion battery risks mentioned in the text.

# Topics for further research:

* Lithium-ion battery risks
* Data-driven methods for SOH prediction
* Empirical models for SOH prediction
* Counterarguments to lithium-ion battery risks
* Alternative solutions to lithium-ion battery risks
* Historical SOH fading data for individualized parameters

# Report location:

<https://www.fullpicture.app/item/332d6bac9c8ad96b7cb8963ad95415a5>