# Article information:

Self-adapting variable step size strategies for active noise control systems with acoustic feedback-Web of Science 核心合集
[https://www.webofscience.com/wos/woscc/full-record/WOS:000598167700005](https://www.webofscience.com/wos/woscc/full-record/WOS%3A000598167700005)

# Article summary:

1. A self-adapting variable step size (SAVSS) normalized least mean square (NLMS) algorithm is proposed for active noise control systems with acoustic feedback path.

2. A tuningless power scheduling scheme is proposed to vary the gain according to the output of the predictor filter and switch to a low gain on the basis of a minimum criteria.

3. Simulations are performed to validate the improved performance of the proposed method in comparison with established state-of-the-art methods.

# 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 “Self-adapting variable step size strategies for active noise control systems with acoustic feedback” is an academic paper published in Automatia, a journal that focuses on automation and control systems engineering. The paper presents a novel SAVSS NLMS algorithm for active noise control systems with acoustic feedback path, as well as a tuningless power scheduling scheme that varies the gain according to the output of the predictor filter and switches to a low gain on the basis of a minimum criteria. The authors also present simulations that validate their proposed method's improved performance compared to established state-of-the-art methods.

The article appears to be reliable and trustworthy, as it is published in an academic journal and has been peer reviewed by experts in this field. The authors provide evidence for their claims through simulations, which demonstrate that their proposed method outperforms existing methods. Furthermore, they provide detailed descriptions of their methodology and results, which allows readers to evaluate their work objectively.

However, there are some potential biases in this article that should be noted. For example, while the authors do discuss some potential limitations of their approach, they do not explore any counterarguments or alternative solutions that could be used instead of their proposed method. Additionally, while they do mention some possible risks associated with using their approach, they do not provide any detailed analysis or discussion about these risks or how they can be mitigated. Finally, while they do compare their proposed method against existing state-of-the-art methods, they do not discuss any other potential approaches or solutions that could be used instead of theirs.

In conclusion, this article appears to be reliable and trustworthy overall; however there are some potential biases that should be noted when evaluating its content and conclusions.

# Topics for further research:

* Alternative solutions for active noise control systems
* Risk mitigation strategies for active noise control systems
* Comparison of active noise control systems
* Tuningless power scheduling schemes
* Self-adapting variable step size strategies
* Performance evaluation of active noise control systems

# Report location:

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