# Article information:

Genetic Algorithm-based tension identification of hanger by solving inverse eigenvalue problem | Request PDF  
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# Article summary:

1. This paper proposes a new method for identifying tension forces of hangers used in arch bridges.

2. The proposed method uses Genetic Algorithm to solve the inverse eigenvalue problem and match theoretical frequencies with measured frequency values.

3. The proposed method has been verified through numerical simulations and field tests, showing its feasibility and accuracy.

# 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 is generally reliable and trustworthy, as it provides evidence for its claims through numerical simulations and field tests. It also presents both sides of the argument equally, by discussing the advantages of the proposed method over existing methods such as vibration-based formulas or finite element models. Furthermore, it acknowledges potential risks associated with the proposed method, such as errors in determining cable force due to sag or stiffness conditions. However, there are some points that could be further explored in order to make the article more comprehensive. For example, it does not discuss possible counterarguments or alternative solutions to the problem at hand, nor does it provide any evidence for its claims regarding accuracy or feasibility of the proposed method. Additionally, there is no mention of potential biases or sources of partiality in the article which could affect its trustworthiness and reliability.

# Topics for further research:

* Alternative solutions for cable force determination
* Accuracy of vibration-based formulas
* Finite element models for cable force determination
* Potential biases in cable force determination
* Sources of partiality in cable force determination
* Risks associated with proposed cable force determination method

# Report location:

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