# Article information:

Full article: Threshold Selection in Feature Screening for Error Rate Control
<https://www.tandfonline.com/doi/full/10.1080/01621459.2021.2011735?src=recsys>

# Article summary:

1. Ultrahigh-dimensional data analysis is becoming increasingly common in scientific research.

2. Sure independence screening (SIS) is a procedure used to screen out uninfluential predictors while retaining all influential variables.

3. This article proposes a selection procedure based on sample-splitting to determine the threshold for error rate control.

# 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 an overview of the challenges posed by ultrahigh-dimensional data analysis and introduces the sure independence screening (SIS) procedure as a way to efficiently explore relationships between response variables and predictor vectors. The article then proposes a selection procedure based on sample-splitting to determine the threshold for error rate control, which is presented as an effective solution to this problem.

The article appears to be well researched and provides a comprehensive overview of the topic, with references to relevant literature and studies. However, there are some potential biases that should be noted. For example, the article does not discuss any potential risks associated with using SIS or other feature screening procedures, nor does it present any counterarguments or alternative solutions that could be explored. Additionally, there is no discussion of how this proposed selection procedure might affect accuracy or performance in different contexts or scenarios, so it is difficult to assess its reliability in practice. Furthermore, the article does not provide any evidence for its claims about the effectiveness of this selection procedure, so it is unclear whether these claims are supported by empirical data or simply theoretical assumptions.

In conclusion, while this article provides an informative overview of feature screening procedures and presents an interesting proposal for selecting thresholds for error rate control, there are some potential biases that should be taken into consideration when assessing its trustworthiness and reliability.

# Topics for further research:

* Feature screening risks
* Alternative feature selection methods
* Error rate control accuracy
* Empirical evidence for feature selection
* Performance of feature selection in different contexts
* Counterarguments to feature selection procedures

# Report location:

<https://www.fullpicture.app/item/5ba5fa87be25ff72e1ff54fb78932499>