# Article information:

Machine Learning Techniques for Arousal Classification from Electrodermal Activity: A Systematic Review - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9695360/>

# Article summary:

1. This article provides a systematic review of the use of electrodermal activity (EDA) and machine learning (ML) techniques for arousal classification.

2. From a set of 284 articles, 59 were selected according to various criteria established.

3. Support vector machines and artificial neural networks stand out within the supervised learning methods given their high-performance values, while unsupervised learning is not present in the detection of arousal through EDA.

# 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 “Machine Learning Techniques for Arousal Classification from Electrodermal Activity: A Systematic Review” is an extensive review of the current state of research on using electrodermal activity (EDA) and machine learning (ML) techniques for arousal classification. The authors have conducted a thorough search of six scientific databases to identify relevant studies, and have selected 59 articles based on various criteria established. The authors have also provided an analysis of all steps involved in processing EDA signals, as well as a comprehensive overview of ML techniques applied to these signals for arousal classification.

The article is generally reliable and trustworthy, as it provides an unbiased overview of the current state of research on this topic. The authors have presented both sides equally, noting potential risks associated with using EDA and ML techniques for arousal classification. Furthermore, they have provided evidence to support their claims by citing relevant studies throughout the article.

However, there are some points that could be improved upon in order to make the article more reliable and trustworthy. For example, the authors could provide more detail about how they conducted their search for relevant studies, such as which keywords were used or which databases were searched. Additionally, they could provide more detail about how they selected which studies to include in their review, such as what criteria were used or how many studies were excluded due to not meeting these criteria. Finally, they could provide more detail about how they analyzed each step involved in processing EDA signals and ML techniques applied to these signals for arousal classification, such as what specific methods were used or what results were obtained from each step/technique.

# Topics for further research:

* Electrodermal Activity Arousal Classification
* Machine Learning Techniques for Arousal Classification
* Systematic Review of Electrodermal Activity
* Search Criteria for Relevant Studies
* Processing Steps for EDA Signals
* ML Techniques for Arousal Classification

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