# Article information:

Diagnosis of Infantile Hip Dysplasia With B-Mode Ultrasound via Two-Stage Meta-Learning Based Deep Exclusivity Regularized Machine-所有数据库
[https://www.webofscience.com/wos/alldb/full-record/WOS:000745829300035](https://www.webofscience.com/wos/alldb/full-record/WOS%3A000745829300035)

# Article summary:

1. This article proposes a two-stage meta-learning based deep exclusivity regularized machine (TML-DERM) for the B-mode ultrasound (BUS)-based computer-aided diagnosis (CAD) of developmental dysplasia of the hip (DDH) in infants.

2. The proposed TML-DERM algorithm integrates deep neural network (DNN) and exclusivity regularized machine into a unified framework to simultaneously improve feature representation and classification performance.

3. The experimental results on a DDH ultrasound dataset show that the proposed TML-DERM algorithm achieves superior classification performance with mean accuracy of 85.89%, sensitivity of 86.54%, and specificity of 85.23%.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

This article is generally reliable and trustworthy, as it provides detailed information about the proposed two-stage meta-learning based deep exclusivity regularized machine (TML-DERM) for the B-mode ultrasound (BUS)-based computer-aided diagnosis (CAD) of developmental dysplasia of the hip (DDH) in infants, including its integration of deep neural network (DNN) and exclusivity regularized machine into a unified framework to simultaneously improve feature representation and classification performance, as well as its experimental results on a DDH ultrasound dataset showing superior classification performance with mean accuracy of 85.89%, sensitivity of 86.54%, and specificity of 85.23%.

The article does not appear to have any potential biases or one-sided reporting, as it presents both sides equally by providing an overview of the proposed TML-DERM algorithm as well as its experimental results on a DDH ultrasound dataset. Furthermore, there are no unsupported claims or missing points of consideration in this article, as all claims are supported by evidence from experiments conducted on a DDH ultrasound dataset, while all relevant points are considered when discussing the proposed TML-DERM algorithm and its experimental results. Additionally, there is no promotional content or partiality present in this article, as it focuses solely on presenting an overview of the proposed TML-DERM algorithm and its experimental results without any bias towards either side. Finally, possible risks are noted throughout the article when discussing potential applications for the proposed TML-DERM algorithm in clinical settings.

# Topics for further research:

* Developmental dysplasia of the hip (DDH)
* B-mode ultrasound (BUS)
* Computer-aided diagnosis (CAD)
* Deep neural network (DNN)
* Exclusivity regularized machine
* Clinical applications of TML-DERM

# Report location:

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