



MSC. DATA SCIENCE & ARTIFICIAL INTELLIGENCE

ADVANCED LEARNING

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Learning without Data Collection

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1 Introduction

“Learning without data collection” is a provocative way to describe the process of learning from a single, or very few example. Humans however, are able to learn in such a way. Algorithms on the other hand, especially deep learning ones, are very data-hungry even for simple tasks such as recognising a cat from a dog.

2 Context of Learning without Data Collection

Learning without data collection can be applied to many fields within machine learning. One notable example is the field of computer vision. When a human

3 Critical comments on the notion of motion invariance

4 Related articles

References

- [1] Betti, A., Gori, M. and Melacci, S., 2022. Deep Learning to See: Towards New Foundations of Computer Vision. arXiv preprint arXiv:2206.15351.