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Recife
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FICHA

BANCA

I dedicate this dissertation to all my family.

ACKNOWLEDGEMENTS

ABSTRACT

Abstract

RESUMO

Resumo.

Palavras-chave: X. Y. Z.

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LIST OF ACRONYMS

CIFAR10   Canadian Institute For Advanced Research

SOM   Self-Organizing Map

SVHN   Street View House Numbers

LIST OF SYMBOLS

Δ Gradient

LIST OF ALGORITHMS

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1
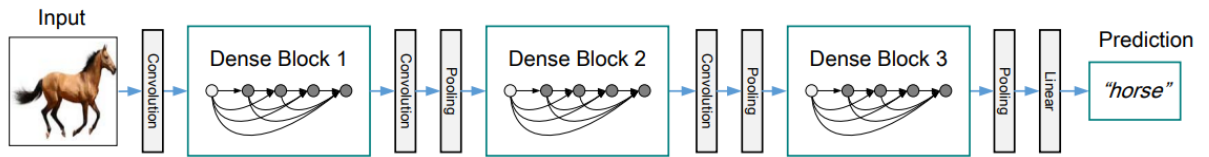
INTRODUCTION

Self-Organizing Map (SOM) (Kohonen, 1990).

Figure 1: DenseNet architecture

$$CE(C,C') = \frac{|U| - D_{max}}{|U|},$$ (1.1)

Table 1: Specifications of the Deep Learning Benchmark Image Datasets

Datasets	Resolution	Channels	Classes
Canadian Institute For Advanced Research (CIFAR10)	32 x 32	3	10
Street View House Numbers (SVHN)	32 x 32	3	10
MNIST	28 x 28	1	10
FashionMNIST	28 x 28	1	10

Algorithm 1: Algorithm

---

1 Initialize parameters;
2 **for** *epoch ← 0 **to** epoch$_{max}$* **do**
3   Choose a random input pattern $\boldsymbol{x}$;
4   **if** *condition* **then**
5   Run X;
6   **else**
7   Run Y.;

REFERENCES

Kohonen, T. (1990). The self-organizing map. *Proceedings of the IEEE*, 78(9):1464–1480.