



**Momento de Retroalimentación: Módulo 2 - Implementación de una técnica de aprendizaje máquina sin el uso de un framework**

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Inteligencia artificial avanzada para la ciencia de datos

Evidencia 1: épocas = 100, learning rate = 1

```
Training neural network (using 100 epochs and a
learning rate of 1) ...
--- Epoch # 0 ---
Accuracy: 35.420%
--- Epoch # 10 ---
Accuracy: 96.422%
--- Epoch # 20 ---
Accuracy: 96.601%
--- Epoch # 30 ---
Accuracy: 96.422%
--- Epoch # 40 ---
Accuracy: 96.422%
--- Epoch # 50 ---
Accuracy: 96.601%
--- Epoch # 60 ---
Accuracy: 96.601%
--- Epoch # 70 ---
Accuracy: 96.780%
--- Epoch # 80 ---
Accuracy: 96.780%
--- Epoch # 90 ---
Accuracy: 96.780%
--- Epoch # 99 ---
Accuracy: 96.780%
```

Evidencia 2: épocas = 100, learning rate = 0.1

**Training neural network (using 100 epochs and a learning rate of 0.1) ...**

**--- Epoch # 0 ---**

**Accuracy: 24.508%**

**--- Epoch # 10 ---**

**Accuracy: 82.111%**

**--- Epoch # 20 ---**

**Accuracy: 94.991%**

**--- Epoch # 30 ---**

**Accuracy: 95.886%**

**--- Epoch # 40 ---**

**Accuracy: 96.601%**

**--- Epoch # 50 ---**

**Accuracy: 96.601%**

**--- Epoch # 60 ---**

**Accuracy: 96.601%**

**--- Epoch # 70 ---**

**Accuracy: 96.601%**

**--- Epoch # 80 ---**

**Accuracy: 96.780%**

**--- Epoch # 90 ---**

**Accuracy: 96.780%**

**--- Epoch # 99 ---**

**Accuracy: 96.780%**

Evidencia 3: épocas = 100000, learning rate = 0.0001

```
Training neural network (using 5 epochs and a
learning rate of 10) ...
--- Epoch # 0 ---
Accuracy: 39.893%
--- Epoch # 10000 ---
Accuracy: 94.097%
--- Epoch # 20000 ---
Accuracy: 95.528%
--- Epoch # 30000 ---
Accuracy: 96.422%
--- Epoch # 40000 ---
Accuracy: 96.601%
--- Epoch # 50000 ---
Accuracy: 96.601%
--- Epoch # 60000 ---
Accuracy: 96.601%
--- Epoch # 70000 ---
Accuracy: 96.780%
--- Epoch # 80000 ---
Accuracy: 96.780%
--- Epoch # 90000 ---
Accuracy: 96.780%
--- Epoch # 99999 ---
Accuracy: 96.601%
```