

Understanding Gradient Descent: Takeaways



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Concepts

- Gradient descent: a set of algorithms that allow us to determine the global minimum in an unknown distribution of data.
- Global minimum: the smallest possible value in a set of data.
- Local minimum: the smallest value in a subset of data.
- Learning rate: the size of the steps a gradient descent algorithm takes.
- Three gradient descent hyperparameters: the learning rate, the stopping conditions, and the maximum number of iterations.
- Gradient descent stopping conditions:
 - The number of iterations
 - The absolute difference of the evaluation function being minimized at the last values is smaller than a given threshold

Resources

- [Gradient Descent](#)
- [Global and Local Minima](#)
- [Learning Rate](#)
- [Hyperplane](#)
- [Interactive Gradient Descent Demo](#)
- [Gradient Descent Visualizer](#)

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