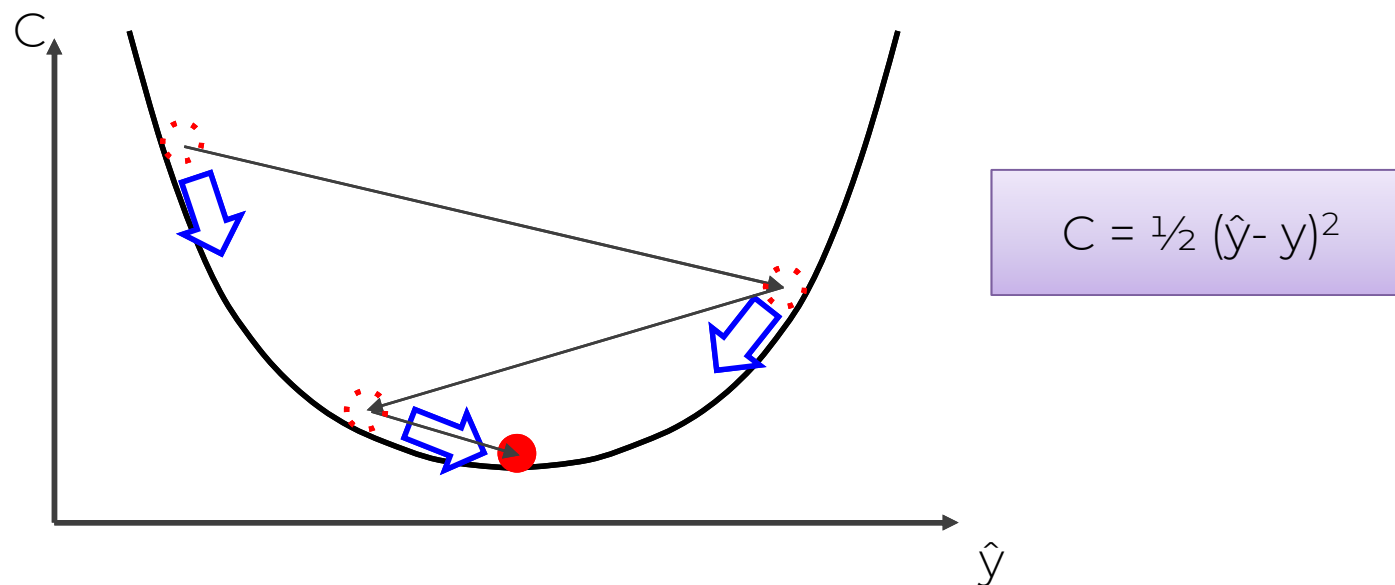
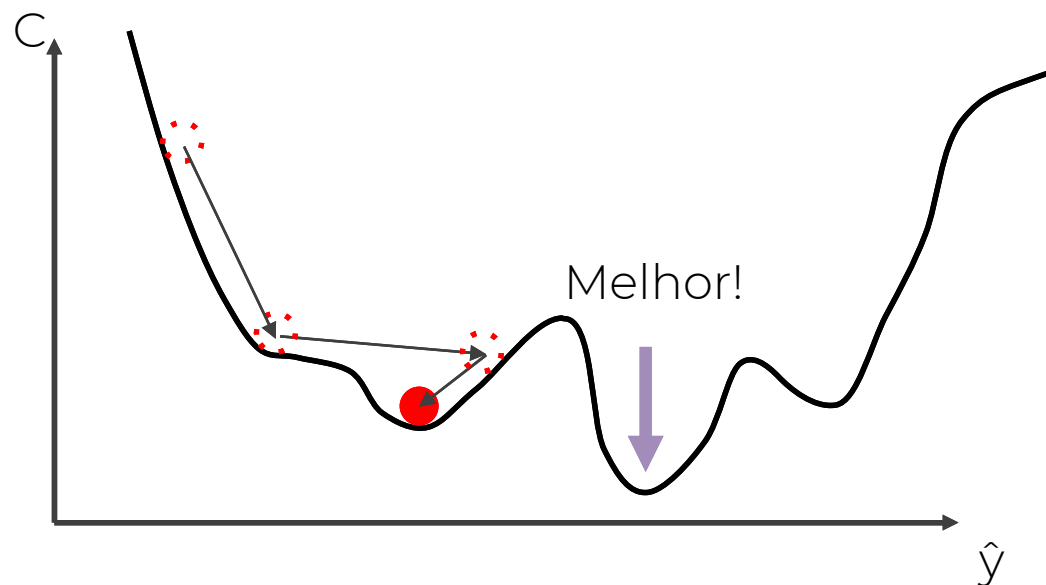


Stochastic Gradient Descent

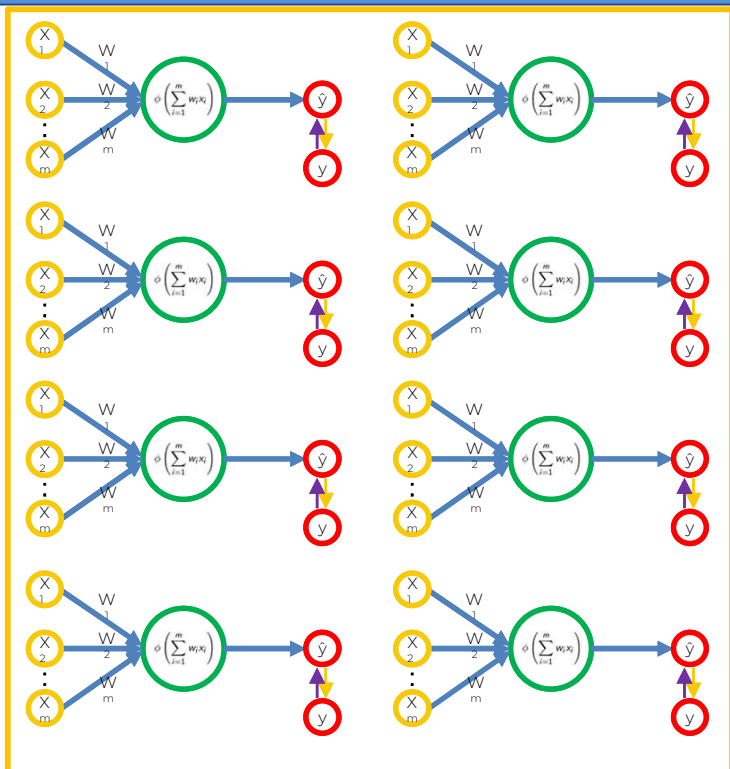
Stochastic Gradient Descent



Stochastic Gradient Descent



Stochastic Gradient Descent

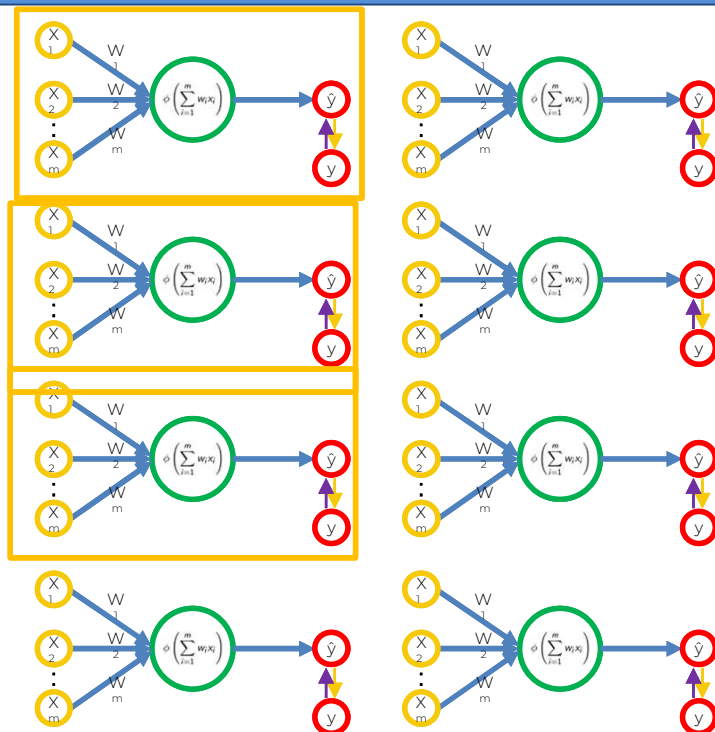


Row ID	Study Hrs	Sleep Hrs	Quiz	Exam
1	12	6	78%	93%
2	22	6.5	24%	68%
3	115	4	100%	95%
4	31	9	67%	75%
5	0	10	58%	51%
6	5	8	78%	60%
7	92	6	82%	89%
8	57	8	91%	97%

$$C = \sum \frac{1}{2} (\hat{y} - y)^2$$

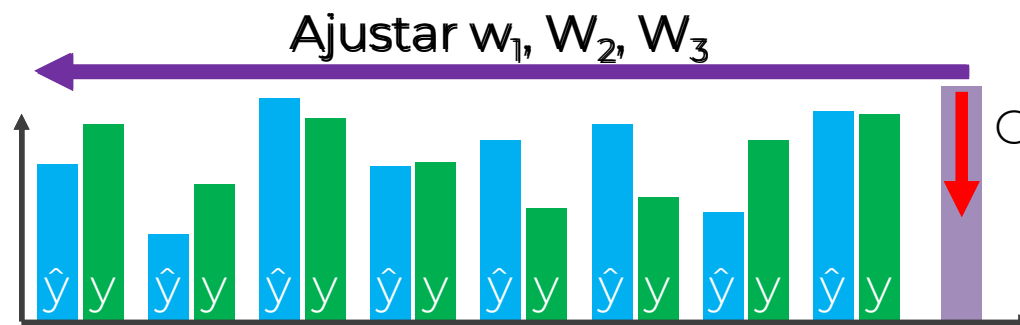


Stochastic Gradient Descent



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Stochastic Gradient Descent

	Row ID	Study Hrs	Sleep Hrs	Quiz	Exam		Row ID	Study Hrs	Sleep Hrs	Quiz	Exam
	1	12	6	78%	93%		1	12	6	78%	93%
	2	22	6.5	24%	68%		2	22	6.5	24%	68%
	3	115	4	100%	95%		3	115	4	100%	95%
Atualiza ←	4	31	9	67%	75%	Atualiza ←	4	31	9	67%	75%
	5	0	10	58%	51%	Atualiza ←	5	0	10	58%	51%
	6	5	8	78%	60%	Atualiza ←	6	5	8	78%	60%
	7	92	6	82%	89%	Atualiza ←	7	92	6	82%	89%
	8	57	8	91%	97%	Atualiza ←	8	57	8	91%	97%

Batch
Gradient
Descent

Stochastic
Gradient
Descent

Stochastic Gradient Descent

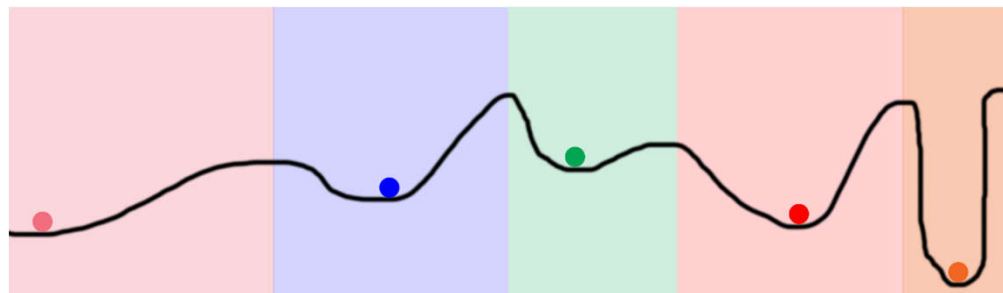
Leitura adicional:

A Neural Network in 13 lines of Python (Part 2 - Gradient Descent)

Andrew Trask (2015)

Link:

<https://iamtrask.github.io/2015/07/27/python-network-part2/>



Stochastic Gradient Descent

Leitura adicional:

Neural Networks and Deep Learning

Michael Nielsen (2015)

Link:

<http://neuralnetworksanddeeplearning.com/chap2.html>

