

2nd-week-2

Gradient Descent by Python

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Agenda

- $y=x^2$

$$f(x, y) = -e^{-(x^2+y^2)} \quad |$$

$$y=x^2$$

- python code
 - modify the function
 - $y=x^2+1$
 - $y=x^2/2-2x$
-

$$f(x, y) = -e^{-(x^2+y^2)} \quad |$$

- python code

Adjusting the parameters

$$\text{loss}(x) = (x - 2.5)^2 - 1$$

Homework

- Giving the results by python
- $y = 0.5 * (x - 0.25) ** 2$
- initial value:
- $\eta = 0.500$
- $\varepsilon = 1e-10$

Questions and Comments?

Thank you!!
