

ILM2

GRADIENT BASED LEARNING PROBLEM SET

we know how to fit lines or linear functions.
what about when the function is non-linear?

consider the corona data of your choice
(eg. countries / states / cities / world) and
what (infected, tested, death, recovered).
you can also take multiple such data.

- ① fit a function-model that suits the data.
clearly explain why this is good model,
including references.

write the objective function and how to
optimize with GD and newton's. your output
is a brief report (not more than one page
in writing).

$$f_0(x) = \tanh x$$

$$f(x) = \alpha \tanh x$$