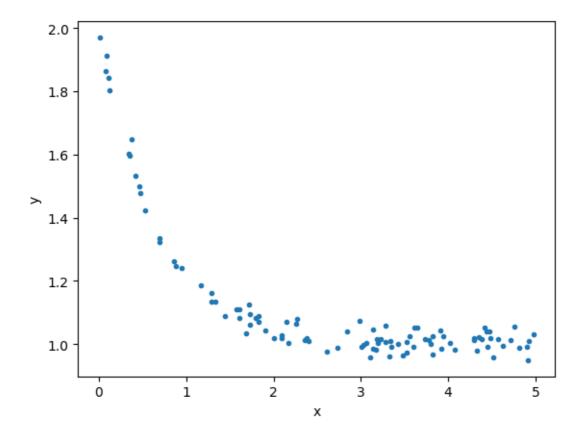
King Mongkut's University of Technology Thonburi Faculty of Engineering, Department of Computer Engineering CPE 342 Machine Learning, 1/2024

Assignment 2: Training models via iterative approach (10 points)

Due: 4 Sep 2024. Please submit your report in PDF to LEB2

Gradient Descent

The data below can be downloaded from this link.



Fit the data to the following model,

$$\hat{y} = c_0 + c_1 e^{c_2 x}$$

Perform the following tasks.

Tasks:

- 1. Write the error/loss function. (1 points)
- 2. Write the gradient of each coefficients. (3 points)
- 3. Write the update rules. (1 points)
- 4. Implement the gradient descent using the given data. (4 points)
- 5. Show the loss value over iterations and the resulting coefficients. (1 points)