


Assignment 1

Start Assignment

- Due Wednesday by 5:59am
- Points 15
- Submitting a file upload

[Assignment 1.pdf \(https://canvas.cmu.edu/courses/46907/files/12589467?wrap=1\)](https://canvas.cmu.edu/courses/46907/files/12589467?wrap=1) 
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Assignment 1 :: Rubric

Criteria	Ratings			Pts
1a. Correctly generate 1,000 observations of x (0-1 range)	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
1b. Properly define y as a linear function of x with random noise	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
1c. Appropriate data preparation for both sklearn and TensorFlow	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
2a. Correct use of sklearn for linear regression	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
2b. Accurate plot of observed vs. predicted values	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
2c. Proper annotation of R^2 value on the plot	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
2d. Correct interpretation of sklearn results	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
3a. Correct implementation of single neuron net	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
3b. Proper training of the TensorFlow model	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
3c. Accurate plot of observed vs. predicted values	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
3d. Proper annotation of R^2 value on the plot	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts
3e. Correct interpretation of TensorFlow results	1 pts Good	0.5 pts Fair	0 pts Poor	1 pts

Criteria	Ratings			Pts
4a. Accurate comparison of coefficient values between sklearn and TensorFlow	1 to >0.5 pts Good	0.5 to >0.0 pts Fair	0 pts Poor	1 pts
4b. Thoughtful interpretation of similarities/differences	1 to >0.5 pts Good	0.5 to >0.0 pts Fair	0 pts Poor	1 pts
4c. Clear explanation of the modelling exercise and results	1 to >0.5 pts Good	0.5 to >0.0 pts Fair	0 pts Poor	1 pts