MSE Deep Learning – Practical Work 1

Group	Student 1	Student 2	Student 3	Exercise 2	Exercise 4	Exercise 5 (optional)	Exercise 6 (optional)	Exercise 7	Feedback (optional)	Grade
G1	Dmitriy An	Andrin Gamma	Narges Ghotbizadehvahdani	Good. PS: flipud --> vertical flip fliplr --> horizontal flip	Good	_	_	Ok. The benefits of transforming a regression problem to a classification one are the simplicity, the interpretability, etc. 3.b) Yes, but all elements in the array will be casted to a single common datatype.		Pass
G2	Silvan Hug	Samuel Küchler		Ok. You can also use the predefined functions: flipud() --> vertical flip fliplr() --> horizontal flip	Good	_	_	Ok. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G3	Basil Rohr	Jan Ryser		Ok. The first question is missing! Rank = 3 Length along the dimensions: 480pixels heigth, 320pixels width, 3 RGB channels	Good	_	_	Ok. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G4	Sophie Jochems	Katsiaryna Mlynchyk		Ok. For simpliciy you can do this: plt.subplot(1, 3, 1) plt.imshow(img * [1, 0, 0]) plt.title("Red") ...	Good	_	_	Ok. 3.a) Aditionally, numpy arrays are more performant and efficient. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G5	Luzian Scherrer	Andreas Hollenweger	Cyril Fischer	Good you can also use the predefined functions: flipud() --> vertical flip fliplr() --> horizontal flip	Good. Using 1/(2*N) instead of 1/N doesn't fundamentally change the behavior of the loss function. It's simply a convention that simplifies the mathematics while achieving the same optimization goals.	_	_	Ok. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G6	Luca Reber	Stefan Pretali	Joel Bachmann	Good	Ok. You should recompute theta using pytorch (torch.tensor(), torch.inverse()...). As for mse_loss and h_theta functions, you can use the ones in the cell above.	_	_	Ok. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G7	Jason Stäuble			Ok. we asked you to make one distortion at a time on the image.	Good	_	_	Ok. 1.c) This scenario is about discovering hidden patterns or structures in customer data without predefined labels. So, it is an **unsupervised learning**. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G8	Rjano Ryser	Adrian Thür	Martin Oswald	Ok. you can also use the predefined functions: flipud() --> vertical flip, ...	Good	_	_	Ok. 3.a) Aditionally, numpy arrays are more performant and efficient. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G9	Pascal Alig	Raffael Alig		Nice work! PS: flipud --> vertical flip fliplr --> horizontal flip	Ok. Your MSE loss is incorrect, you should obtain a loss = 138034.94	_	_	Well done.		Pass
G10	Selvin Blöchlinger	Philipp Lehnert	Colin Gubler	Good	Good.	_	_	Ok. 3.a) More importantly, numpy arrays are more performant and efficient. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G11	Pascal Meyer	Ruwen Frick		Good. For simpliciy you can do this: plt.subplot(1, 3, 1) plt.imshow(img * [1, 0, 0]) plt.title("Red") ...	Ok. Your MSE loss is incorrect, should be equal to 138034.94	_	_	Good. 3.b) **Yes**, but all elements in the array will be casted to a single common datatype.		Pass
G12	Cristobal Perez	Roger Näf	Thomas Annen	Good.	Good.	_	_	Good. 3.b) I'll say yes, but all elements in the array will be casted to a single common datatype.	Next time, don't put empty folders for optional exercices!	Pass
G13	Andreas Kuhn	Milena Squindo		Ok. Your hflip result is false! you can use the predefined functions: flipud() --> vertical flip fliplr() --> horizontal flip	Ok. You should obtain the same MSE loss as in Part2	File Load Error your notebook file is broken, it won't open!	_	Good.		Pass
G14	Jonas Bilal			Good	Good.	_	_	Not submitted	Next time it will be a FAIL as ex7 isn't an optional exercise!	Pass
G15	Carlo Grigioni	Christian Pala	Alessandro Centazzo	Good	Good. You should draw the linear regression line on top of the scatter plot!	_	_	Good. 3.b) I'll say yes, but all elements in the array will be casted to a single common datatype.		Pass
G16	Fabian Merkli	Sven De Gasparo		OK. Your code is incorrect. You should do this: plt.subplot(1, 3, 1) plt.imshow(img * [1, 0, 0]) plt.title("Red") ...	Good.	_	_	Ok. the simplicity and the interpretability are among the benefits of transforming a regression problem into a classification one. 2nd part of question 3.d) is missing! For square images: Shape attribute: (n, n), where n is the size of the square image (width = height). For color images: Shape attribute: (n, n, 3), where 3 represents the RGB channels.		Pass
G17	Seraina Rebsamen	Vincent Stadler	Kimia Rabishokr	Ok	Ok	_	_	Good		Pass
G18	Antonio Briatico			Ok	Ok. Detail: in function h_theta(...), you mix theta_0 and theat_1 with theta	_	_	Good		Pass
G19	Shilpi Garg	Sadith Kuveju		2nd version submitted per mail Ok, but some errors in 1st version (in RGB components sub-plots)	Ok	_	_	3.a) There are other differences 3.b to 3.e) Not done	Please submit your solution on time on Cyberlearn.	Pass
G20	David Kempf	Dominic Künzi		Ok	Ok	Good	_	2) You must discretize the continuous output (target) into classes 3.b) if all elements in the array are cast to a single common datatype, like Object.		Pass
G21	Felix Saaro	Valentin Huber		See: https://stackoverflow.com/questions/44752962/how-to-correctly-display-red-green-and-blue-rgb-channels-of-an-image-with-py	Ok	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G22	Rudolf Rüfenacht	Philip Vinding	David Kühnhanss	Ok	Ok	_	_	1) Explanations missing! 3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G23	Roberto Vicario			See: https://stackoverflow.com/questions/44752962/how-to-correctly-display-red-green-and-blue-rgb-channels-of-an-image-with-py	Ok	Good	Ok	Good		Pass
G24	Honey Lane Ante	Zeynep Babur		Ok	Ok	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G25	Joel Frieden	Maël Scheidegger		Only Scheidegger's notebook is entirely correct	Ok for both	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.	Please submit only one solution per group!	Pass
G26	Chia-Hua Yeh	Drilon shabani		Ok	Part 2 and 3 are missing!	_	_	2) How can we do that? 3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.	Exercise 4 is one of the main part of the PW1. Next time, it will be a fail.	Pass
G27	Dave Brunner	Sven Nievergelt		Ok	Ok	_	_	Ok		Pass
G28	Mehmet Cihan Sakman	Gaye Çolakoğlu		Ok	Ok	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G29	Gianluca Pargätzi			Ok	Ok	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G30	Marius Lerf			See: https://stackoverflow.com/questions/44752962/how-to-correctly-display-red-green-and-blue-rgb-channels-of-an-image-with-py	Ok	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G31	Merlin Brell			See: https://stackoverflow.com/questions/44752962/how-to-correctly-display-red-green-and-blue-rgb-channels-of-an-image-with-py	Ok	_	_	3.b) Yes, if all elements in the array are cast to a single common datatype, like Object.		Pass
G32	David Zbinden			1st part Ok, 2nd part wrong, 3rd part missing! See: https://stackoverflow.com/questions/44752962/how-to-correctly-display-red-green-and-blue-rgb-channels-of-an-image-with-py	Missing exercise!	_	_	Missing exercise!		Fail

Notes:

* a/ont copié la sol. de l'an passé
** a/ont vraisemenblement utilisé ChatGPT

Cell templates:

Excellent! Nice work!
Ok (good/normal work)
Ok, but... (remarks)
Bad, wrong, errors,...
Missing exercise

Pass
Fail