## ☑ 축하합니다! 통과하셨습니다!

**받은 성적** 100% **통과 점수:** 80% 이상

Practical aspects of Deep Learning 최근 제출물 성적 100% 1. If you have 10,000,000 examples, how would you split the train/dev/test set? 1/1점 O 60% train . 20% dev . 20% test 98% train . 1% dev . 1% test 33% train . 33% dev . 33% test 맞습니다 The dev and test set should: 1/1점 Have the same number of examples Come from the same distribution O Come from different distributions Be identical to each other (same (x,y) pairs) 맞습니다 3. If your Neural Network model seems to have high variance, what of the following would be promising things to try? 1/1점 Add regularization 맞습니다 Get more test data Get more training data 맞습니다 Make the Neural Network deeper ☐ Increase the number of units in each hidden layer 4. You are working on an automated check-out kiosk for a supermarket, and are building a classifier for apples, 1/1점 bananas and oranges. Suppose your classifier obtains a training set error of 0.5%, and a dev set error of 7%. Which of the following are promising things to try to improve your classifier? (Check all that apply.) Increase the regularization parameter lambda 맞습니다 Decrease the regularization parameter lambda Get more training data 맞습니다 Use a bigger neural network 5. What is weight decay? 1/1점 A regularization technique (such as L2 regularization) that results in gradient descent shrinking the weights on every iteration. The process of gradually decreasing the learning rate during training. Gradual corruption of the weights in the neural network if it is trained on noisy data. A technique to avoid vanishing gradient by imposing a ceiling on the values of the weights. 맞습니다 6. What happens when you increase the regularization hyperparameter lambda? Weights are pushed toward becoming bigger (further from 0) Weights are pushed toward becoming smaller (closer to 0) O Gradient descent taking bigger steps with each iteration (proportional to lambda)

O Doubling lambda should roughly result in doubling the weights

맞습니다

7.	Wit	h the inverted dropout technique, at test time:	1/1점
	•	You do not apply dropout (do not randomly eliminate units) and do not keep the 1/keep_prob factor in the calculations used in training	
	0	You do not apply dropout (do not randomly eliminate units), but keep the 1/keep_prob factor in the calculations used in training.	
	0	You apply dropout (randomly eliminating units) and do not keep the 1/keep_prob factor in the calculations used in training	
	0	You apply dropout (randomly eliminating units) but keep the 1/keep_prob factor in the calculations used in training.	
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8.	Incr	reasing the parameter keep_prob from (say) 0.5 to 0.6 will likely cause the following: (Check the two that apply)	1/1점
		Increasing the regularization effect	
	<b>~</b>	Reducing the regularization effect	
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		Causing the neural network to end up with a higher training set error	
	<b>~</b>	Causing the neural network to end up with a lower training set error	
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9.	Whi	ich of these techniques are useful for reducing variance (reducing overfitting)? (Check all that apply.)	1/1점
	<b>~</b>	Data augmentation	
	(	맞습니다	
	<b>~</b>	Dropout	
	(	맞습니다	
		Vanishing gradient	
		Xavier initialization	
	<b>~</b>	L2 regularization	
	(	맞습니다	
		Exploding gradient	
		Gradient Checking	
10	. Wh	y do we normalize the inputs $x$ ?	1/1점
	•	It makes the cost function faster to optimize	
	0	It makes it easier to visualize the data	
	0	It makes the parameter initialization faster	
	0	Normalization is another word for regularizationIt helps to reduce variance	
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