Deep Learning Illustrated Errata

"To err and err and err again, but less and less and less." ~ Piet Hein

Most recently updated by [Jon Krohn](#) on September 21st, 2021.
Submit new prospective errata by emailing jon AT jonkrohn.com.

Chapter 2

- Page 30: The `bit.ly/word2viz` link is broken. Please use [jonkrohn.com/word2viz](#) instead.

Chapter 4

- Page 56: "At long last, we reach the deep reinforcement learning section near the center of the Venn diagram in Figure 4.3"... should read Figure 4.1. (Thanks to diligent reader Neil Caren for noticing this one!)

Chapter 5

- Page 83: The section title "Training a Deep Learning Model" should be "Training a Neural Network Model"

Chapter 7

- Figure 7.1: There's a directed edge (an arrow) missing between the neuron labeled x_2 and the neuron labeled a_2
- Figure 7.2: Ditto
- Figure 7.3: Ditto
- Figure 7.4: Ditto. In addition, there's another directed edge missing between the neurons a_4 and y_3

Chapter 9

- Page 138: The first sentence in the Batch Normalization section should read: "During neural network training, the distribution of parameters in a given layer may gradually move around…"
- Footnote 16 should read: "This circumstance can be annotated as $p \gg n$, indicating the *p*arameter count is much greater than the *n*umber of samples."
- Page 147: Instead of "we're", it should read "we've reached a momentous milestone"

- Page 151 in the 10th line from the bottom: Remove "accuracy" from the phrase "there could be small accuracy gains". (diligently spotted by Haesun Park, the translator of *Deep Learning Illustrated* into Korean, who also spotted several errata later in the book)
- Page 152: The command in step 2 for running TensorBoard should be `tensorboard --logdir==`logs` --port 6006` (as opposed to the `--logdir` argument being set to the overly-specific `` `logs/deep-net` ``)

Chapter 10

- Page 167: "spacial context" should be "spatial context"
- Figure 10.10: On the right-hand side of the figure, the conv blocks should appear above the pooling block.
- Figure 10.12: Along the bottom of the figure, the lowest block in the sixth column should be black not red, as with all of the other skip connections in that part of the figure.
- Footnote 33: Apologies to Ross Girshick, his surname does not have an "n" in it.
- Footnote 36: Ditto

Chapter 11

- Example 11.30 is erroneously identical to Example 11.29. Instead, Example 11.30 should read "`ydf[(ydf.y == 1) & (ydf.y_hat < 0.1)].head(10)`". Thanks to Krzysztof Ograbek for finding this one!
- On page 238:
  - The third bullet should end with "...has a length of 398, corresponding to a 398 x 256 output shape".
  - The fifth bullet should likewise have its second sentence amended to say "squash the activation map from 398 x 256 to 1 x 256".
- Figure 11.25: An occurrence of the word "output" is misspelt "ouput"
- Example 11.40: Programmatically it makes no difference, but for consistency with Figure 11.27, it might be more straightforward if `k_conv_1` were set to `2` and `k_conv_2` were set to `3` instead of the other way around.
- On page 255, footnote 59 should read "The index goes up to only 5,049…"

Chapter 12

- On page 259, the second line under "Essential GAN Theory" should reference Figure 3.1 not Figure 3.4.
- On page 277, the range in the fourth bullet's second sub-bullet should be [-1.0, 1.0) not [-1.0, 1.0].

Chapter 13

- Page 286: Add "sonar" to the list of autonomous vehicle sensors, e.g., "cameras, radar, sonar, lidar"
- Footnote 2 should read: "Same principle as sonar but uses lasers intead of sound." (Thanks to Austen Groener, an AI Research Scientist at Lockheed Martin Space, for pointing this one out.)
- Page 302: The fourth line should read "`done` equals `True`" not "`done` equals `true`".

Chapter 14

- Page 327: In both the third line from the top and in footnote 21, "Chapter 1" should be "Chapter 4".

Appendix B

- There's an error in the partial derivative notation for backpropagation. See [this issue in GitHub](#).
- Page 337: The fifth line under Equation B.12 should read "a^{L-1} will change" (superscript "L-1" in LaTeX notation) not "a_{L-1} will change" (subscript "L-1" in LaTeX).