

Errata for Kobzar, Kohn, and Wang, New
Potential-Based Bounds for Prediction with Expert
Advice, *Proceedings of the 33rd Annual
Conference on Learning Theory (COLT)*, PMLR
125:2370-2405, 2020

May 7, 2021

- p. 4, penultimate line: replace “bound” with “bounds”
- p. 6, line 7 from the bottom:¹ delete “to”
- p. 7, line 14 from the top, replace $\max_i x$ with $\max_i x_i$
- p. 7, line 20 from the top (equation (7)) replace $\max G_i$ with $\max_i G_i$
- p. 8, line 8 from the top: delete “the ” before a^c
- p. 8, line 13 from the top (Example 2): replace $\max G_i$ with $\max_i G_i$
- p. 8, footnote 8 replace “Lemmas” with “Lemma”
- p. 9, lines 4 and 5 from the top (Example 3) replace $\max G_i$ with $\max_i G_i$
- p. 10, line 2 from the bottom: delete “as”
- p. 15, line 11 from the top: replace sup with inf
- p. 15, line 11 from the bottom: replace “oroof” with “proof”
- p. 24, last paragraph of Appendix G.1: replace
 $i \geq j \geq l$, then $x_{(i)} + x_{(j)} - 2 \max_{k \neq i, j} (x_{(k)} - z_{(k)}) \geq x_i + x_l - 2 \max_{k \neq i, l} (x_{(k)} - z_{(k)})$
with
 $i \leq j \leq l$, then $x_{(i)} + x_{(j)} - 2 \max_{k \neq i, j} (x_{(k)} - z_{(k)}) \geq x_{(i)} + x_{(l)} - 2 \max_{k \neq i, l} (x_{(k)} - z_{(k)})$
- p. 31, line 8 from the top: replace “Thus, we can assume p_k is the smallest set contained in R ” with “Thus, we can let p_k be such a set contained in R with the smallest k ”

¹In this errata, for purposes of corrections in the main body of the article, we do not count the lines comprising the footnotes

- p. 32, line 3 from the top: between “strictly bigger” and “which is a contradiction” insert “than the original cut (which does not divide 1 and 2)”
- p. 32, line 8 from the top: move “Also denote $T(A, B)$ as the total weights of edges between A and B .” to p. 31 as the first full sentence. On p 32 replace the aforementioned sentence with “By Lemma 9, the maxcut of $\{1, 2, \dots, N\}$, has the form $\{1\} \cup S_1, \{2\} \cup S_2$.”
- p. 32, line 9 from the top: replace $\sum_{i=3}^N a_i$ with $\sum_{i=2}^N a_i$
- p. 32, line 11 from the top: replace $2 \leq i \leq \lfloor \frac{N}{2} \rfloor$ with $1 \leq i \leq \lfloor \frac{N}{2} \rfloor$
- p. 32, line 13 from the top: replace $4Ma_{2k}$ with $4Ma_{2M}$
- p. 36, line 3 from the top: replace “Radamacher” with “Rademacher”