Some LATEX utils

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This document demos some things I've collected for nicer texing. For instance, underlines like this <u>example</u>.

Also, citations with auto links, like this: check out the link in the refences when I cite, e.g. MacKay (2003), Harremoës and Naftali (2007), Schwartz (2008), and Upper (1974). Links are auto-generated from the url, doi, etc. fields.

Simple titled box

For a box like this, use the kast environment.

Information theory operators, for things like this:

$$I(X;Y) = D_{KL}(P_{(X,Y)} || P_X \otimes P_Y) = \mathbb{E}_{p_{(X,Y)}} \left[\log \frac{p_{(X,Y)}(x,y)}{p_X(x)p_Y(y)} \right]$$
(1)
$$= H(X) - H(X | Y)$$
(2)
$$= \int_{\mathcal{X} \times \mathcal{Y}} \log \left(\frac{dP_X \otimes P_Y}{dP_{(X,Y)}} \right) dP_X \otimes P_Y$$
(3)

References

Harremoës, Peter and Tishby Naftali (2007). "The information bottleneck revisited or how to choose a good distortion measure". In: 2007 IEEE International Symposium on Information Theory, pp. 566–570 (cit. on p. 1).

MacKay, David J. C. (2003). *Information theory, inference and learning algo*rithms. Cambridge university press (cit. on p. 1).

Schwartz, Martin A. (June 2008). "The Importance of Stupidity in Scientific Research". In: *Journal of Cell Science* 121.11, p. 1771 (cit. on p. 1).

Upper, Dennis (1974). "The Unsuccessful Self-Treatment of a Case of "Writer's Block"". In: Journal of Applied Behavior Analysis 7.3, pp. 497–497 (cit. on p. 1).