

# Reading Papers

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April 29, 2018

- ▶ You can take a DL model and make it probabilistic. (Section 3 assign prior probability on the parameter  $\theta$  and infer the posterior.)
- ▶ You can integrate the DL module in probabilistic models. (Section 4 introduced variational autoencoders.)
- ▶ Advantages from probabilistic models(Section 5.1)
- ▶ Advantages from deep models(Section 5.2)

# References I



Tran, D., Hoffman, M. D., Saurous, R. A., Brevdo, E.,  
Murphy, K., and Blei, D. M. (2017).

Deep probabilistic programming.

*arXiv preprint arXiv:1701.03757.*