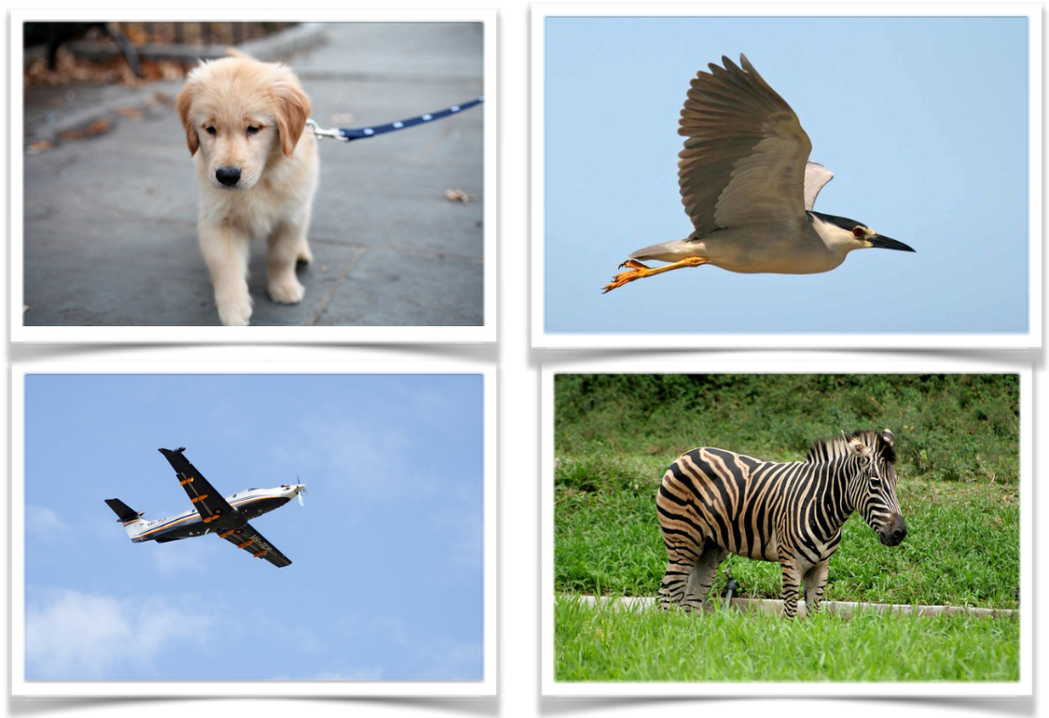
Transforming noise

Modeling the distribution of images

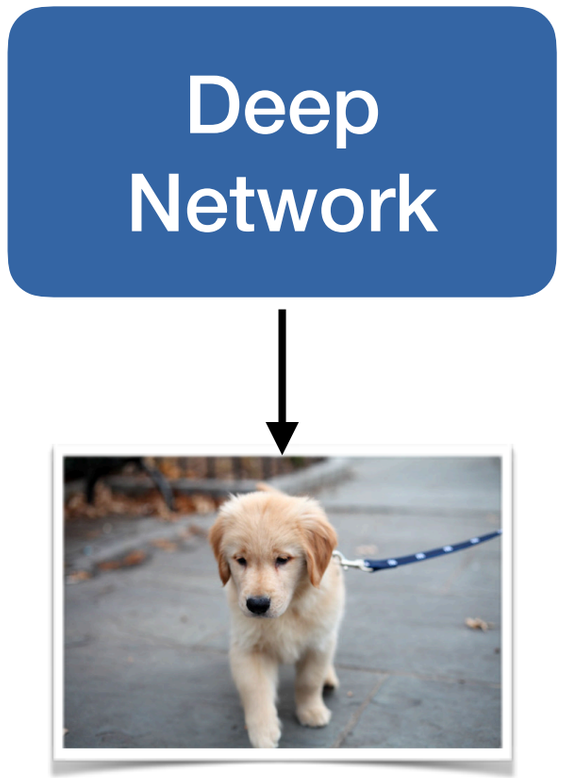
- Goal
  - Model $P(\mathbf{x})$
  - As a sample distribution $X \sim P$
    - Only generate images



Sampling distributions

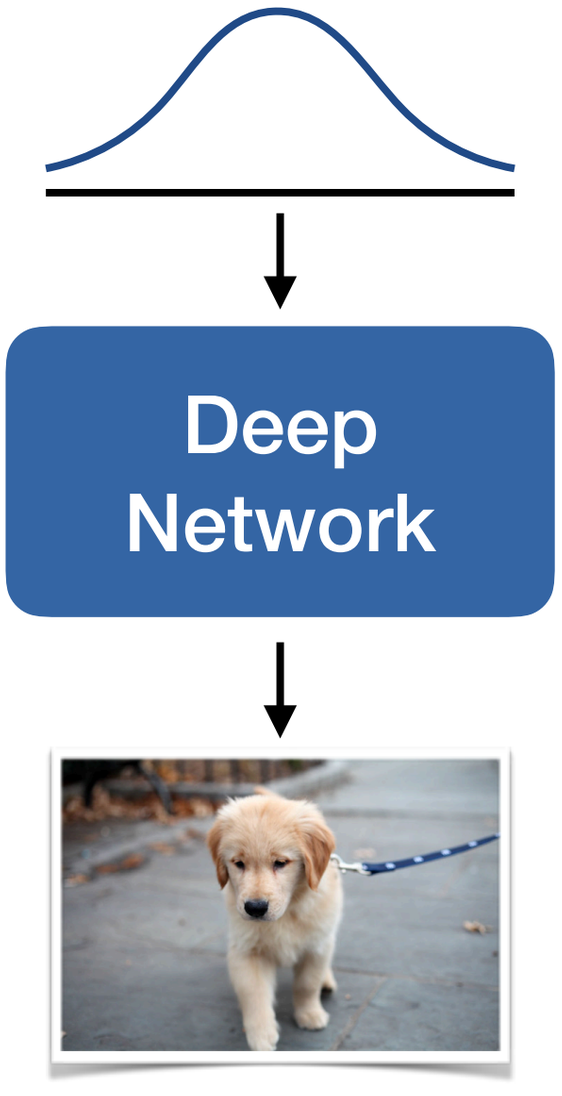
- Model $X \sim P$ as network

- What is the input?



Transforming noise

- Input: Random noise
  - e.g. $\mathbf{z} \sim \mathcal{N}(\mathbf{0}, \mathbf{I})$
- Output: Image



How do we train this?

- How do we assign $\mathbf{z} \sim \mathcal{N}(\mathbf{0}, \mathbf{I})$ to the corresponding image?