

## Top-k Example: k=3

12. Keep Top k Abilities:

cat: 0.45, dog: 0.45, bird: 0.18, mouse: 0.15  
Sum = 0.78  
cat: 0.45, dog: 0.23, bird: 0.18, mouse: 0.08  
Sum = 0.78  
cat: 0.45, dog: 0.23, bird: 0.18, mouse: 0.04  
Sum = 0.78  
.....

**Result: Sample from {cat: 58%, dog: 23%, bird: 19%}**

*Prevents sampling from long tail ("mouse" eliminated)*