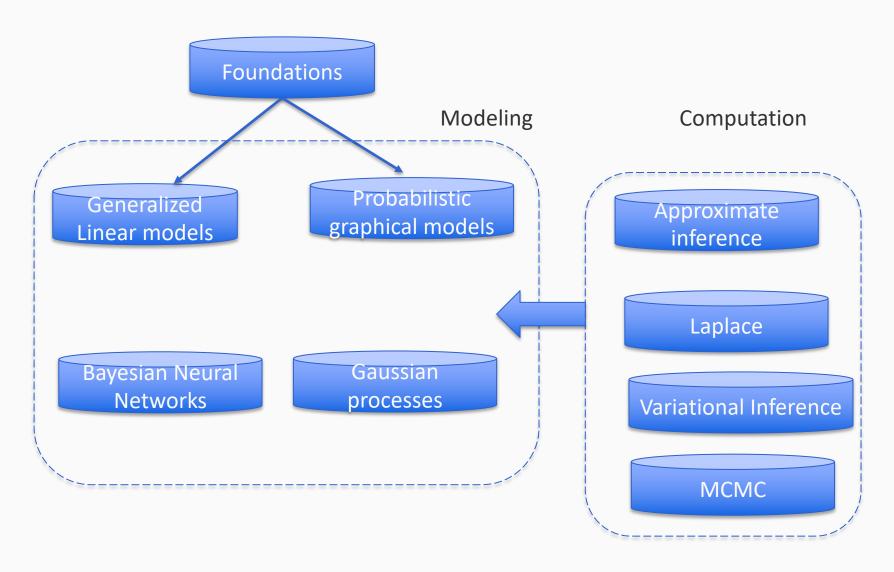
Approximate Inference

Spring 2024

Instructor: Shandian Zhe zhe@cs.utah.edu
School of Computing



What we have learned so far



Next step

- We will discuss approximate inference schemes
- We will give examples about how to apply these schemes
- With these powerful computational tools in hand, we will discuss specific models as concrete examples

Outline

- Laplace approximation
- Variational Inference
- Markov Chain Monte-Carlo

We expect that you will

- capture the key idea of these algorithms
- implement these approximate inference algorithms for a few well-known models!
- in the remaining section, see many practice tasks