Bookmarks

- Introduction
- Part 1: Probability and Inference
- **Part 2: Inference in Graphical Models**

Week 5: Introduction to Part 2 on Inference in Graphical Models

Week 5: Efficiency in Computer Programs
Exercises due Oct 20, 2016 at 02:30 IST

Week 5: Graphical Models
Exercises due Oct 20, 2016 at 02:30 IST

Week 5: Homework 4
Homework due Oct 20, 2016 at 02:30 IST

Week 6: Inference in Graphical Models - Marginalization

Part 2: Inference in Graphical Models > Week 5: Efficiency in Computer Programs > Big O Notation with Multiple Variables

Big O Notation with Multiple Variables

Bookmark this page

BIG O NOTATION WITH MULTIPLE VARIABLES

Big O notation can be used with functions that depend on multiple variables.

Example: In our material coverage for Bayes' theorem for random variables, we saw in an exercise where we have n random variables that we want a posterior distribution over, where each of these random variables has alphabet size k. Then computing the denominator of Bayes' theorem involves summing over k^n table entries, a computation that takes running time $\mathcal{O}(k^n)$.

Exercises due Oct 27, 2016 at 02:30 IST

Week 6: Special Case: Marginalization in Hidden Markov Models
Exercises due Oct 27, 2016 at 02:30 IST

Week 6: Homework 5
Homework due Oct 27, 2016 at 02:30 IST

Weeks 6 and 7: Mini-project on Robot Localization (to be posted)