0.1 Introduction

Bit on cluster analysis, bit on multiple datasets, applications of this to e.g. gene expression data

0.2 Literature

MDI paper summary
SMC paper summary
Maybe bit on Sarah Wade's paper? [1]

0.3 Methods

Algorithm used for current paper

Data: Prior
Result: Clustering allocation
for i = *1,...,* N **do**
  for m = *1,...,* M **do**
    for k = *1,...,* K **do**
      Sample $c_{i,k}^{(m)}$;
      $q(c_{i,k}^{(m)} = k) \propto k^*(y_{i,k}|c_{i,j}^{(m)} = k)\gamma_{k,j}$
      $\xi_m = \xi_m \sum_k \gamma_{k,j} k^*(y_{i,k}|c_{i,j}^{(m)} = k)$
      $\xi_m = \xi_m \prod(1 + \phi_{k,l}\mathbb{1}(-))$
    end
  end
end
if *understand* **then**
  go to next section;
  current section becomes this one;
else
  go back to the beginning of current section;
end

Algorithm 1: How to write algorithms

0.4 Example application

0.5 Conclusions and proposals for future work

Bibliography

[1] Sara Wade and Zoubin Ghahramani. Bayesian cluster analysis: Point estimation and credible balls. *arXiv preprint arXiv:1505.03339*, 2015.