## Index

### B
- Bayesian inference, 75, 77
- binary mixture model, 32
- block model, 58

### C
- classification
  - expectation-maximization, 22, 28
- cluster
  - analysis, 1
  - number of, 14, 51
- clustering, 1
  - crossed, 53
  - fuzzy, 8, 24
  - model-based, 11
- complete data, 16
- components number of, 14
- conditional independence, 59

### D
- data
  - binary, 32
  - categorical, 36
  - contingency, 41
  - continuous, 26
  - high dimensional, 9
  - qualitative, 36
  - distribution
    - Bernoulli, 32
    - Gaussian, 26
  - dynamic cluster method, 7, 22, 57

### E
- EM algorithm, 15, 17–20
- entropy, 19, 26, 170
- error rate, 64–66
- expectation-maximization, 15

### G, H
- Gaussian mixture model, 26, 28
- hierarchical clustering, 4
  - Ward’s method, 3

### I
- inertia
  - intraclass, 30
  - within-group, 2
- initialization, choice of, 51
K
k-means, 5
algorithm, 3
fuzzy, 8
k-medoids, 8
k-modes, 8

L
latent class model, 32
latent block model, 59, 60
likelihood
classification, 21
complete-data, 16

M
map
Kohonen, 8
table contingency, 41, 43, 47
self-organizing, 8
maximum a posteriori, 20

mixture, 11
binary, 32
Gaussian, 26
MNDKI2, 41, 47, 48
model
choice of, 51
latent class, 32
mixture, 11
parsimonious, 33, 38
multinomial mixture model, 43

S
sparse data, 77
sum of squares within-group,
2, 3, 23, 30

T