Chapter 1

Appendix for Kernels

1.1 Gaussian Conditionals

$$\mathbf{x}_{A}|\mathbf{x}_{B} \sim \mathcal{N}(\boldsymbol{\mu}_{A} + \boldsymbol{\Sigma}_{AB}\boldsymbol{\Sigma}_{BB}^{-1}(\mathbf{x}_{B} - \boldsymbol{\mu}_{B}), \boldsymbol{\Sigma}_{AA} - \boldsymbol{\Sigma}_{AB}\boldsymbol{\Sigma}_{BB}^{-1}\boldsymbol{\Sigma}_{BA}),$$
 (1.1)