Errata

- p. 10. In the definition of the MISE*, $f(x)$ should be replaced by $\hat{f}_P(x; g)$.
- p. 25. In the first line of the SAMSE definition, the left hand side should be multiplied by ψ_0.
- p. 25. In the definition of A_0, the left hand side should be multiplied by ψ_0.
- p. 25. The denominator of the fraction in Equation (2.10) should be $(4j + 4d)A_1$.
- p. 50. Equation (3.4) should be

$$\boldsymbol{\varphi}_{\mathbf{A}} = \phi_{\mathbf{A}}(\boldsymbol{X})\mathbf{D}_d^T \operatorname{vec}(\mathbf{A}^{-1}\boldsymbol{X}\boldsymbol{X}^T\mathbf{A}^{-1} - \mathbf{A}^{-1}).$$

- p. 63. The seventh term of the Taylor's series expansion should be $\operatorname{tr}^3(\mathbf{A}D^2\boldsymbol{w}\boldsymbol{w}^T)$.
- p. 63. The expressions for m_4, m_6 and m_8 should be

$$\begin{aligned}
m_4 &= \operatorname{tr}^2(\mathbf{A}D^2) + 2\operatorname{tr}(\mathbf{A}^2(D^2)^2) \\
m_6 &= \operatorname{tr}^3(\mathbf{A}D^2) + 6\operatorname{tr}(\mathbf{A}D^2)\operatorname{tr}(\mathbf{A}^2(D^2)^2) + 8\operatorname{tr}(\mathbf{A}^3(D^2)^3) \\
m_8 &= \operatorname{tr}^4(\mathbf{A}D^2) + 12\operatorname{tr}^2(\mathbf{A}D^2)\operatorname{tr}(\mathbf{A}^2(D^2)^2) + 32\operatorname{tr}(\mathbf{A}D^2)\operatorname{tr}(\mathbf{A}^3(D^2)^3) \\
&\quad + 12\operatorname{tr}^2(\mathbf{A}^2(D^2)^2) + 48\operatorname{tr}(\mathbf{A}^4(D^2)^4).
\end{aligned}$$

  Although this doesn't affect the following result for $\mathbb{E}\,\phi_{\mathbf{A}}(\boldsymbol{X}_1 - \boldsymbol{X}_2)$ since we have

$$\begin{aligned}
\int_{\mathbb{R}^d} \operatorname{tr}^2(\mathbf{A}D^2)d(\boldsymbol{y})f(\boldsymbol{y})\ d\boldsymbol{y} &= \int_{\mathbb{R}^d} (D^T\mathbf{A}D)^2 f(\boldsymbol{y})f(\boldsymbol{y})\ d\boldsymbol{y} \\
&= \int_{\mathbb{R}^d} \operatorname{tr}(\mathbf{A}^2(D^2)^2)f(\boldsymbol{y})f(\boldsymbol{y})\ d\boldsymbol{y}
\end{aligned}$$

  as we define $D^2 = DD^T$. So

$$\int_{\mathbb{R}^d} m_4 f(\boldsymbol{y})f(\boldsymbol{y})\ d\boldsymbol{y} = 3\int_{\mathbb{R}^d} \operatorname{tr}(\mathbf{A}^2(D^2)^2)f(\boldsymbol{y})f(\boldsymbol{y})\ d\boldsymbol{y}$$

  etc.
- p. 109. In step 4(a), the end point of the summation indexed by k should be m rather than ν.