Corrections for First Edition, First Printing (2021)

Corrections

Problem 4.13a: The answer positive definite should be positive semidefinite.

Problem 4.15: The expression $2\lambda_1 + 3\lambda_2$ should be $4\lambda_1 + 9\lambda_2$, and the expression $(\lambda_1 - \lambda_2)\mathbf{v} \cdot \mathbf{w}$ should be $(-\lambda_1 - \lambda_2)\mathbf{v} \cdot \mathbf{w}$ in the displayed formula. In the explanation, $\mathbf{v}^T\mathbf{v} = \|\mathbf{v}\| = 2$ should be $\mathbf{v}^T\mathbf{v} = \|\mathbf{v}\|^2 = 4$, $\mathbf{w}^T\mathbf{w} = \|\mathbf{w}\| = 3$ should be $\mathbf{w}^T\mathbf{w} = \|\mathbf{w}\|^2 = 9$, and the last part, starting from We claim that... should be replaced by If $\lambda_1 \neq \lambda_2$, then $\mathbf{v} \cdot \mathbf{w} = 0$. Hence $f(\mathbf{v} - \mathbf{w}) = 4\lambda_1 + 9\lambda_2$ when $\lambda_1 \neq \lambda_2$, and if $\lambda_1 = \lambda_2$, then $f(\mathbf{v} - \mathbf{w}) = 13\lambda_1 - 2\lambda_1\mathbf{v} \cdot \mathbf{w}$.

Problem 6.3b: The x-coordinates ± 5 of the optimal candidate points should be $\pm\sqrt{5}$.

Solutions to final exam BI, November 2019: The printed solutions are from another exam, see https://www.dr-eriksen.no/teaching/GRA6035/Exams/final-2019-11-sol.pdf for the solutions to Final exam BI, November 2019.