List of Corrections for the Printed Book

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Below is a list of corrections for the printed version of the book. Please update your copy of the book accordingly.

- (page 4) Theorem 0.1.1 — Characterization of the Supremum. In the second part (ii) on infimum $\forall \epsilon > 0 \; \exists a \in A : L - \epsilon > a \geq L$ should be replaced by

$$\forall \epsilon > 0 \; \exists a \in A : L + \epsilon > a \geq L.$$

- (page 9, line 7 from below): "If $\boldsymbol{u}$ is a column vector in $\mathbb{F}^m$ and U_1 is an $(n-1) \times m$ matrix, then the $n \times m$-block matrix U ..." should be replaced by

> "If $\boldsymbol{u}$ is a column vector in $\mathbb{F}^n$ and U_1 is an $n \times (m-1)$ matrix, then the $n \times m$-block matrix U ..."

- (page 11, last line) $\operatorname{tr}(A^*) = \operatorname{tr}(A)$ should be replaced by

$$\operatorname{tr}(A^*) = \overline{\operatorname{tr}(A)}.$$

- (page 123, Theorem 4.6.1 Taylor's formula) "In the setup of Def 4.5.1, the remainder-term R_2 has the form" should be replaced by "In the setup of Def 4.5.1 together with the assumption that f is a C^2 function, the remainder-term R_2 has the form."

- (page 134, Def. 5.2.2 Stationary Point) "Let $A \subset \mathbb{R}$ be a set." should be replaced by "Let $A \subseteq \mathbb{R}^n$ be a set." Several $\subset$ in this chapter can be replaced by $\subseteq$