Errata for Second Edition, Third Printing

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February 21, 2023

1. Page 34, third displayed equation. Replace \( \frac{1}{2} |x(1) - \hat{x}^{-1}(1)|^2_{P^{-1}(1)} \) with \( (1/2)|x(1) - \hat{x}^{-1}(1)|^2_{P^{-1}(1)} + d(0) \).

2. Page 34, fourth displayed equation. Replace \( |x(1) - \hat{x}^{-1}(1)|^2_{P^{-1}(1)} \) with \( |x(1) - \hat{x}^{-1}(1)|^2_{P^{-1}(1)} + d(0) \).

3. Page 36, ninth line from bottom. Change "the cost is \( d \)" to "the cost is \( (1/2)d \)."

4. Page 36, last line. Change \( |x(1) - \hat{x}(1)|(P(1)) \) to \( |x(1) - \hat{x}(1)|^2_{P(1)} \).

5. Page 46, fourteenth line. Change "uniqueness of the estimator" to "existence of the estimator for all measurements \( y \)." Thanks to Steven Kuntz of UCSB for helpful discussion of this issue.

6. Page 94, twelfth line from bottom. Change "generally polyhedral" to "often polyhedral."

7. Page 98, Proof, part (b). Change The set \( U_N(x) \) is defined by a finite set of inequalities each of which has the form \( \eta(x,u) \leq 0 \) in which \( \eta(\cdot) \) is continuous. It follows that \( U_N(x) \) is closed. to

   We first show that \( U_N(x) \) is closed for all \( x \in X_0 \). By Assumption 2.2 and Proposition 2.1, the function \( \phi(k;\cdot) \) is continuous for any \( k \in I_{0,p} \). Since \( X_f \) are closed by Assumption 2.3, any sequence \((x(i),u(i)) \in Z_N \) that converges to, say, \((\hat{x},\hat{u}) \) satisfies \( \phi(k;\hat{x},\hat{u}) \in \hat{x} \) for all \( k \in I_{0,N} \) and \( \phi(N;\hat{x},\hat{u}) \in X_f \). Hence \((\hat{x},\hat{u}) \in Z_N \) so that \( Z_N \) is closed. It follows from (2.5) that \( U_N(x) \) is closed for all \( x \in X_0 \).

   Thanks to Xiyao Liu of Northwestern Polytechnical University, Xi’an, China, for pointing out this erratum.

8. Page 117, seventh line from bottom. Replace \( V_N(x) \) with \( V_N(x^\pi) \). Thanks to Xiyao Liu of Northwestern Polytechnical University, Xi’an, China, for pointing out this erratum.

9. Page 162, second line from bottom. Change \( \hat{Q} \) to \( -Q \). Thanks to Koty McAlister of UCSB for pointing out this erratum.

10. Pages 209–210. State constraints should not have been included in the inherent robustness discussion. The following corrections repair this error. Thanks to Farshid Asadi of Southern Methodist University for pointing out this erratum.