

## Model Predictive Control: Theory, Computation, and Design 2nd Edition

### Errata for Second Edition, First Printing

Check [www.che.wisc.edu/~jbrow/mpc](http://www.che.wisc.edu/~jbrow/mpc) for a current list

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1. Page 52, Figure 1.6. Change  $L_x$  and  $L_d$  to  $\tilde{L}_x$  and  $\tilde{L}_d$ , respectively, in the figure, and add the following sentence to the caption, "For simplicity we show the steady-state Kalman predictor form of the state estimator where  $\hat{x} := \hat{x}(k | k - 1)$  and  $\tilde{L}_x := AL_x + B_d L_d$  and  $\tilde{L}_d := L_d$ ." Thanks to Pratyush Kumar and Travis Arnold of UW for pointing out this erratum.
2. Page 114, Assumption 2.14 (a). Change  $\ell(x, u)r$  to  $\ell(x, u)$  in the last inequality.
3. Page 146, 13 lines from top. Replace  $i \in \mathbb{I}_{i:N-1}$  with  $j \in \mathbb{I}_{i:N-1}$ . Thanks to Danylo Malyuta of U. Washington for pointing out this erratum.
4. Page 366, Exercise 5.5. Change  $d_H(\mathbb{A} \oplus \mathbb{C}, \mathbb{B} \oplus \mathbb{C}) = d_H(\mathbb{A}, \mathbb{B})$  to  $d_H(\mathbb{A} \oplus \mathbb{C}, \mathbb{B} \oplus \mathbb{C}) \leq d_H(\mathbb{A}, \mathbb{B})$ . Thanks to Dr. Saša V. Raković for pointing out this erratum.
5. Page 366, Exercise 5.5. Delete the phrase, "satisfying  $\mathbb{B} \subseteq \mathbb{A}$ ."
6. Page 366, Exercise 5.6. Delete the phrase, "satisfying  $\mathbb{A} \subseteq \mathbb{B}$ ."
7. Page 366, Exercise 5.8. Replace  $+$  with  $\oplus$  (two places).
8. Page 329, Exercise 4.7, 3rd line. Change, "let  $\gamma(\cdot)$  be any  $\mathcal{K}$  function," to "let  $\gamma(\cdot)$  be any  $\mathcal{K}$  function and  $a_i \in \mathbb{R}_{\geq 0}, i \in \mathbb{I}_{1:n}$ ."
9. Page 527, 5 lines from bottom. Change "plus  $n$  forward sweeps," to "plus  $m$  forward sweeps."