

## Assignments for Meeting on Mar. 23, 2021 (1/2)

- ▶ Read the chapter C. Samson, Morin, P., & Lenain, R., "Modeling and Control of Wheeled Mobile Robots", Chapter 49 in Springer Handbook of Robotics (Eds. Siciliano, B. & Khatib, O.), 2nd Edition, Springer, 2016.  
[https://doi.org/10.1007/978-3-319-32552-1\\_49](https://doi.org/10.1007/978-3-319-32552-1_49).
- ▶ Read the technical report Coulter, R.C., "Implementation of the pure pursuit path tracking algorithm", Robotics Institute, Carnegie Mellon University, Pittsburgh PA, Report number CMU-RI-TR-92-01, 1992.  
<https://apps.dtic.mil/sti/pdfs/ADA255524.pdf>
- ▶ Read the article Werling, M., Gröll, L., & Bretthauer, G., "Invariant trajectory tracking with a full-size autonomous road vehicle". IEEE Transactions on Robotics, 26(4), 758–765, 2010.  
<https://doi.org/10.1109/TR0.2010.2052325>.

## Assignments for Meeting on Mar. 23, 2021 (2/2)

- ▶ Select one method for path or trajectory following from the literature and apply it in simulation on a vehicle. The code skeleton from Hand-in Exercise 3 in TSFS12 could provide a basis for path representation and controller implementation. Those that have taken TSFS12 should extend their implementation beyond pure pursuit and linear state-feedback control for path following.
- ▶ **Next meeting: Tuesday March 23, 2021, at 15:15 in Zoom.**
- ▶ Lecture responsibility: Birgitta Wingqvist.