

DAFTAR PUSTAKA

- [1] P. H. Utomo, “Pengendalian Sistem Pendulum Terbalik Dengan Umpan-Balik State Dan Output,” 2009.
- [2] H. Nurhadi dan A. P. Terdahulu, “Desain Sistem Kendali Rotary Pendulum Dengan Sliding -PID,” *J. Tek. pomits*, vol. 2, no. 2, 2013.
- [3] J. S. P. Hennyta dan T. Agustinah, “Kontrol Tracking Fuzzy Menggunakan Model Following untuk Sistem Pendulum Kereta,” *J. Tek. ITS*, vol. 5, no. 2, 2016.
- [4] Wahyudi, I. Setiawan, dan E. Tigor, “Tuning Parameter Kontrol Proporsional – Integral Menggunakan Sugeno Fuzzy Inference System,” *J. Tek. Elektro*, vol. 10, no. 2, hal. 97–102, 2008.
- [5] S. Udomsin dan S. Potiya, “Inverted Pendulum Control,” *KKU Eng. J.*, vol. 25, no. 3, hal. 41–66, 1998.
- [6] E. Vinodh Kumar dan J. Jerome, “Robust LQR controller design for stabilizing and trajectory tracking of inverted pendulum,” *Procedia Eng.*, vol. 64, hal. 169–178, 2013.
- [7] K. Ogata, *Modern Control Engineering*, vol. 17. 2010.
- [8] S. Skotesgad, & I. Postlethwaite, *Multivariable Feedback Control Analysis and Design*, McGraw Hill, New York, 1996.
- [9] C. W. C. W. Anderson, “Learning to Control an Inverted Pendulum Using Neural Networks,” *IEEE Control Syst. Mag.*, vol. 9, no. 3, pp. 31–37, 1989.
- [10] A. Kusmantoro, “Transformasi Sinyal Pada Sistem Kendali Menggunakan GUI dan Simulink Matlab” *Jurnal Informatika UPGRIS*, vol 1, no.2, 2015.
- [11] N. B. Hartono, Kemalasari, B. Sumantri, dan A. Wijayanto, “Pengaturan Posisi Motor Servo DC dengan Metode P, PI, dan PID.”
- [12] L. Hakim, R. Dikairono, dan T. Mujiono, “Implementasi perhitungan posisi robot dengan FPGA menggunakan rotary encoder,” hal. 2–4.
- [13] S. kumar Roy dan A. R. Mohanty, “Use of rotary optical encoder for firing detection in a spark ignition engine,” *Meas. J. Int. Meas. Confed.*, vol. 98, hal. 60–67, 2017.
- [14] T. Watanabe, “Self-calibratable rotary encoder,” *Seimitsu Kogaku*

- Kaishi/Journal Japan Soc. Precis. Eng.*, vol. 82, no. 9, hal. 792–796, 2016.
- [15] A. Rahayuningtyas, “Pembuatan Sistem Pengendali 4 Motor DC Penggerak 4 Roda Secara Independent Berbasis Mikrokontroler AT89C2051,” *J. Fis. Himpun. Fis. Indones.*, vol. 9, no. 2, hal. 24–33, 2009.
- [16] K. Ogata, *Modern Control Engineering 3rd Edition*. 1997.
- [17] G. D. Nusantoro, M. A. Muslim, dan R. Indra, “Rancang Bangun Rotary Inverted Pendulum dengan Menggunakan Kontrol PID,” vol. 6, no. 2, hal. 161–170, 2012.
- [18] A. Mz, “Pulse Width Modulation (PWM),” *Inst. Pertan. Bogor*, hal. 1–4, 2015.
- [19] Arduino, “Arduino - Introduction,” *arduino.cc*. hal. 1, 2015.
- [20] H. D. Laksono, *Sistem Kendali*, Graha Ilmu, Yogyakarta, 2014.

