















- [13] R. Damiano, F. Nejjari, and V. Puig, "Quasi-LPV modeling, identification and control of a twin rotor MIMO system," *Control Engineering Practice*, vol. 21, no. 6, pp. 829-846, Jun. 2013.
- [14] Y. Bouzid, H. Siguerdidjane, and Y. Bestaoui, "Nonlinear internal model control applied to VTOL multi-rotors UAV," *Mechatronics*, vol. 47, pp. 49-66, Nov. 2017.
- [15] L. Shi, and L. Yue-Yang, "Neural network based nonlinear model predictive control for an intensified continuous reactor," *Chemical Engineering and Processing: Process Intensification*, vol. 96, pp. 14-27, Oct. 2015.
- [16] S. S. Butt and H. Aschemann, "Multi-variable integral sliding mode control of a two degrees of freedom helicopter," *IFAC-PapersOnLine*, vol. 48, no. 1, pp. 802-807, Jan. 2015.
- [17] R. Raul-Cristian, R. Mircea-Bogdan and P. Radu-Emil. "Multi-input–multi-output system experimental validation of model-free control and virtual reference feedback tuning techniques." *IET Control Theory & Applications* 10, no. 12, pp. 1395-1403, Aug. 2016.
- [18] J. C. Salazar, P. Weber, R. Sarrate, D. Theilliol and F. Nejjari, "MPC design based on a DBN reliability model: Application to drinking water networks," *IFAC-PapersOnLine*, vol. 48, no. 21, pp. 688-693, Jan. 2015.
- [19] S. N. Pawar, R. H. Chile, and B. M. Patre, "Modified reduced order observer based linear active disturbance rejection control for TITO systems," *ISA transactions*, vol. 71, pp. 480-494, Nov. 2017.
- [20] L. Shi, and L. Yueyang, "Model predictive control of an intensified continuous reactor using a neural network Wiener model," *Neurocomputing*, vol. 185, pp. 93-104, Apr. 2016.
- [21] P. Chalupa, J. Příkryl, and J. Novák, "Modelling of twin rotor MIMO system," *Procedia Engineering*, vol. 100, pp. 249-258, Jan. 2015.
- [22] N. K. Arun and B. M. Mohan, "Modeling and Computational Aspects of Nonlinear Fuzzy TITO PI/PD Controller via Height Defuzzification," *IFAC-PapersOnLine*, vol. 51, no. 1, pp. 347-352, Dec. 2018.
- [23] P. Radu-Emil, R. Mircea-Bogdan, R. Raul-Cristian, and E. M. Petriu, "Model-free sliding mode control of nonlinear systems: Algorithms and experiments," *Information Sciences*, vol. 381, pp. 176-192, Mar. 2017.
- [24] A. Dòria-Cerezo, L. Van Der Heijden, and J. MA Scherpen, "Memristive port-Hamiltonian control: Path-dependent damping injection in control of mechanical systems," *European Journal of Control*, vol. 19, no. 6, pp. 454-460, Dec. 2013.
- [25] R. Damiano, A. Cristofaro, K. Gryte and J. Tor Arne, "LPV model reference control for fixed-wing UAVs," *IFAC-PapersOnLine*, vol. 50, no. 1, pp. 11559-11564, Jul. 2017.
- [26] Pandey Samit Kumar, *Control of Twin Rotor MIMO System*, LAP Lambert Academic Publishing, 2015. ISBN: 978-3659760402
- [27] Faghri, Ardeshir, and Aneja Sandeep. "Analysis of Performance of Backpropagation ANN with Different Training Parameters." *Neural networks in transport applications*. Routledge, pp. 57-84, 2019.
- [28] Aggarwal, Charu C, *Neural Networks and Deep Learning*, Springer International Publishing, 2019, ISBN: 978-3-319-94463-0

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