

DAFTAR PUSTAKA

- [1] Z. Liu, “A Survey of Intelligence Methods in Urban Traffic Signal Control,” 2007.
- [2] R. S. Sutton and A. G. Barto, “Reinforcement Learning: An Introduction,” p. 352.
- [3] V. Mnih *et al.*, “Playing Atari with Deep Reinforcement Learning.” arXiv, Dec. 19, 2013. Accessed: Nov. 21, 2023. [Online]. Available: <http://arxiv.org/abs/1312.5602>
- [4] V. Mnih *et al.*, “Human-level control through deep reinforcement learning,” *Nature*, vol. 518, no. 7540, pp. 529–533, Feb. 2015, doi: 10.1038/nature14236.
- [5] M. Shamsi, A. Rasouli Kenari, and R. Aghamohammadi, “Reinforcement learning for traffic light control with emphasis on emergency vehicles,” *J. Supercomput.*, vol. 78, no. 4, pp. 4911–4937, Mar. 2022, doi: 10.1007/s11227-021-04068-w.
- [6] C. Cai, C. K. Wong, and B. G. Heydecker, “Adaptive traffic signal control using approximate dynamic programming,” *Transp. Res. Part C Emerg. Technol.*, vol. 17, no. 5, pp. 456–474, Oct. 2009, doi: 10.1016/j.trc.2009.04.005.
- [7] P. K.J, H. K. A.N, and S. Bhatnagar, “Multi-agent reinforcement learning for traffic signal control,” in *17th International IEEE Conference on Intelligent Transportation Systems (ITSC)*, Oct. 2014, pp. 2529–2534. doi: 10.1109/ITSC.2014.6958095.
- [8] Y. Liu, L. Liu, and W.-P. Chen, “Intelligent Traffic Light Control Using Distributed Multi-agent Q Learning.” arXiv, Nov. 29, 2017. Accessed: Nov. 12, 2022. [Online]. Available: <http://arxiv.org/abs/1711.10941>
- [9] W. Genders and S. Razavi, “Evaluating reinforcement learning state representations for adaptive traffic signal control,” *Procedia Comput. Sci.*, vol. 130, pp. 26–33, 2018, doi: 10.1016/j.procs.2018.04.008.
- [10] admin, “Pengertian APILL???” Dinas Perhubungan Kabupaten Sleman. Accessed: Dec. 06, 2023. [Online]. Available: <https://perhubungan.slemankab.go.id/apill/>
- [11] S. Humagain, R. Sinha, E. Lai, and P. Ranjitkar, “A systematic review of route optimisation and pre-emption methods for emergency vehicles,” *Transp. Rev.*, vol. 40, pp. 1–19, Jul. 2019, doi: 10.1080/01441647.2019.1649319.
- [12] S. Humagain and R. Sinha, “Routing Emergency Vehicles in Arterial Road Networks using Real-time Mixed Criticality Systems,” in *2020 IEEE 23rd International Conference on Intelligent Transportation Systems (ITSC)*, Sep. 2020,

- [13] R. Anil, M. Satyakumar, and A. Salim, “Emergency Vehicle Signal Pre-emption System for Heterogeneous Traffic Condition : A Case Study in Trivandrum City,” in *2019 4th International Conference on Intelligent Transportation Engineering (ICITE)*, Singapore: IEEE, Sep. 2019, pp. 306–310. doi: 10.1109/ICITE.2019.8880151.
- [14] Maricopa Association of Governments (MAG), “Emergency Vehicle Preemption State of the Practice Study, Final Report.” Aug. 2016.
- [15] J. Gifford, D. Pelletiere, and J. Collura, “Stakeholder Requirements for Traffic Signal Preemption and Priority in Washington, D.C., Region,” *Transp. Res. Rec. J. Transp. Res. Board*, vol. 1748, no. 1, pp. 1–7, Jan. 2001, doi: 10.3141/1748-01.
- [16] E. J. Nelson and D. Bullock, “Impact of Emergency Vehicle Preemption on Signalized Corridor Operation: An Evaluation,” *Transp. Res. Rec. J. Transp. Res. Board*, vol. 1727, no. 1, pp. 1–11, Jan. 2000, doi: 10.3141/1727-01.
- [17] J. Obenberger and J. Collura, “Transition Strategies to Exit Preemption Control: State-of-the-Practice Assessment,” *Transp. Res. Rec. J. Transp. Res. Board*, vol. 1748, no. 1, pp. 72–79, Jan. 2001, doi: 10.3141/1748-09.
- [18] “The Impacts of Emergency Vehicle Signal Preemption on Urban Traffic Speed.”
- [19] B. Brian Park, Ph.D., I. Yun, Ph.D., and M. Best, “Evaluation of Pre-Emption and Transition Strategies for Northern Virginia Smart Traffic Signal Systems (NVSTSS),” *Commonw. Va.*, 2008.
- [20] J. Xu, “Minimizing Negative Impacts Caused by Emergency Vehicle Preemption on Arterial Signal Coordination,” Thesis, 2021. Accessed: Oct. 12, 2022. [Online]. Available: <https://scholarworks.unr.edu//handle/11714/8038>
- [21] I. Yun, B. “Brian” Park, C. K. Lee, and Y. T. Oh, “Investigation on the exit phase controls for emergency vehicle preemption,” *KSCE J. Civ. Eng.*, vol. 15, no. 8, pp. 1419–1426, Nov. 2011, doi: 10.1007/s12205-011-1326-2.
- [22] “Reinforcement Learning: An Introduction | MIT Press eBooks | IEEE Xplore.” Accessed: May 06, 2023. [Online]. Available: <https://ieeexplore-ieee-org.ezproxy.ugm.ac.id/book/6267343>
- [23] S. I. Mohamed, “Decentralized traffic management system via reinforcement learning,” vol. 9, no. 11, p. 9, 2018.
- [24] S. A. A. Hassani, “A REINFORCEMENT LEARNING APPROACH TO

VEHICLE PATH OPTIMIZATION IN URBAN ENVIRONMENTS”.

- [25] K. Arulkumaran, M. P. Deisenroth, M. Brundage, and A. A. Bharath, “Deep Reinforcement Learning: A Brief Survey,” *IEEE Signal Process. Mag.*, vol. 34, no. 6, pp. 26–38, Nov. 2017, doi: 10.1109/MSP.2017.2743240.
- [26] V. François-Lavet, P. Henderson, R. Islam, M. G. Bellemare, and J. Pineau, 2018.
- [27] Y. Liu, Y. Yuan, J. Shen, and W. Gao, “Emergency response facility location in transportation networks: A literature review,” *J. Traffic Transp. Eng. Engl. Ed.*, vol. 8, no. 2, pp. 153–169, Apr. 2021, doi: 10.1016/j.jtte.2021.03.001.
- [28] J. Schmidhuber, “Deep Learning in Neural Networks: An Overview,” *Neural Netw.*, vol. 61, pp. 85–117, Jan. 2015, doi: 10.1016/j.neunet.2014.09.003.
- [29] R. R. Mouly, “Traffic Congestion Reduction in SUMO using Reinforcement Learning Method”.
- [30] L. N. Alegre, “SUMO-RL,” *GitHub repository*. GitHub, 2019. [Online]. Available: <https://github.com/LucasAlegre/sumo-rl>
- [31] “SUMO Documentation.” Accessed: Jan. 03, 2023. [Online]. Available: <https://sumo.dlr.de/docs/index.html>
- [32] M. Behrisch, L. Bieker, J. Erdmann, and D. Krajzewicz, “SUMO – Simulation of Urban MObility,” p. 6, 2011.
- [33] “netedit - SUMO Documentation.” Accessed: Jan. 03, 2023. [Online]. Available: <https://sumo.dlr.de/docs/Netedit/index.html>
- [34] “TraCI - SUMO Documentation.” Accessed: May 10, 2023. [Online]. Available: <https://sumo.dlr.de/docs/TraCI.html>
- [35] “Welcome to Python.org,” Python.org. Accessed: May 10, 2023. [Online]. Available: <https://www.python.org/about/>
- [36] “TensorFlow,” *Wikipedia*. Apr. 20, 2023. Accessed: May 10, 2023. [Online]. Available: <https://en.wikipedia.org/w/index.php?title=TensorFlow&oldid=1150793006>
- [37] K. Team, “Keras documentation: About Keras.” Accessed: May 10, 2023. [Online]. Available: <https://keras.io/about/>
- [38] “DQN — Stable Baselines3 2.2.1 documentation.” Accessed: Dec. 03, 2023. [Online]. Available: <https://stable-baselines3.readthedocs.io/en/master/modules/dqn.html>
- [39] “Gymnasium Documentation.” Accessed: Dec. 03, 2023. [Online]. Available:

- [40] “Traffic Lights - SUMO Documentation.” Accessed: May 06, 2023. [Online]. Available: https://sumo.dlr.de/docs/Simulation/Traffic_Lights.html
- [41] “Trip - SUMO Documentation.” Accessed: Nov. 21, 2023. [Online]. Available: <https://sumo.dlr.de/docs/Tools/Trip.html>
- [42] “elementsDemand - SUMO Documentation.” Accessed: May 06, 2023. [Online]. Available: <https://sumo.dlr.de/docs/Netedit/elementsDemand.html>
- [43] L. N. Alegre, A. L. C. Bazzan, and B. C. Da Silva, “Quantifying the impact of non-stationarity in reinforcement learning-based traffic signal control,” *PeerJ Comput. Sci.*, vol. 7, p. e575, May 2021, doi: 10.7717/peerj-cs.575.
- [44] “Safety - SUMO Documentation.” Accessed: Nov. 20, 2023. [Online]. Available: <https://sumo.dlr.de/docs/Simulation/Safety.html>
- [45] “Python: module traci._vehicle.” Accessed: Nov. 20, 2023. [Online]. Available: https://sumo.dlr.de/pydoc/traci._vehicle.html
- [46] B. Decardi-Nelson and F. You, “Optimal energy management in greenhouses using distributed hybrid DRL-MPC framework,” in *33rd European Symposium on Computer Aided Process Engineering*, vol. 52, A. C. Kokossis, M. C. Georgiadis, and E. Pistikopoulos, Eds., in *Computer Aided Chemical Engineering*, vol. 52. , Elsevier, 2023, pp. 1661–1666. doi: <https://doi.org/10.1016/B978-0-443-15274-0.50264-X>.
- [47] R. Ducrocq and N. Farhi, “Deep Reinforcement Q-Learning for Intelligent Traffic Signal Control with Partial Detection.” arXiv, Sep. 29, 2021. Accessed: Feb. 13, 2023. [Online]. Available: <http://arxiv.org/abs/2109.14337>
- [48] Z. Li, C. Xu, and G. Zhang, “A Deep Reinforcement Learning Approach for Traffic Signal Control Optimization,” p. 21.
- [49] H. Su, Y. D. Zhong, J. Y. J. Chow, B. Dey, and L. Jin, “EMVLight: a Multi-agent Reinforcement Learning Framework for an Emergency Vehicle Decentralized Routing and Traffic Signal Control System.” arXiv, Jun. 29, 2022. Accessed: Nov. 30, 2022. [Online]. Available: <http://arxiv.org/abs/2206.13441>