References

[1] Roberto F Abenoza, Oded Cats, and Yusak O Susilo. "Travel satisfaction with public transport: Determinants, user classes, regional disparities and their evolution". In: *Transportation Research Part A: Policy and Practice* 95 (2017), pp. 64–84.

[2] Amina Adadi and Mohammed Berrada. "Peeking inside the black-box: a survey on explainable artificial intelligence (XAI)". In: *IEEE access* 6 (2018), pp. 52138–52160.

[3] Marıa J Alonso-González et al. "What are the determinants of the willingness to share rides in pooled on-demand services?" In: *Transportation* 48.4 (2021), pp. 1733–1765.

[4] Javier Alonso-Mora, Stuart Baker, and Daniela Rus. "Multi-robot formation control and object transport in dynamic environments via constrained optimization". In: *The International Journal of Robotics Research* 36.9 (2017), pp. 1000–1021.

[5] Javier Alonso-Mora, Paul Beardsley, and Roland Siegwart. "Cooperative collision avoidance for nonholonomic robots". In: *IEEE Transactions on Robotics* 34.2 (2018), pp. 404–420.

[6] Javier Alonso-Mora et al. "On-demand high-capacity ride-sharing via dynamic trip-vehicle assignment". In: *Proceedings of the National Academy of Sciences* 114.3 (2017), pp. 462–467.

[7] Szilárd Aradi. "Survey of deep reinforcement learning for motion planning of autonomous vehicles". In: *IEEE Transactions on Intelligent Transportation Systems* (2020).

[8] Theo Arentze et al. "ALBATROSS: multiagent, rule-based model of activity pattern decisions". In: *Transportation Research Record* 1706.1 (2000), pp. 136–144.

[9] Peyman Ashkrof et al. "Ride Acceptance Behaviour of Ride-sourcing Drivers". In: *arXiv preprint arXiv:2107.07864* (2021).

[10] Peyman Ashkrof et al. "Understanding ride-sourcing drivers' behaviour and preferences: Insights from focus groups analysis". In: *Research in Transportation Business & Management* 37 (2020), p. 100516.

[11] Hutan Ashrafian. "Intelligent robots must uphold human rights". In: *Nature* 519.7544 (2015), pp. 391–391.

[12] James Ault and Guni Sharon. "Reinforcement Learning Benchmarks for Traffic Signal Control". In: (2021).

[13] Yoram Bachrach et al. "Negotiating team formation using deep reinforcement learning". In: *Artificial Intelligence* 288 (2020), p. 103356.

[14] Milos Balac and Sebastian Hörl. "Simulation of intermodal shared mobility in the San Francisco Bay Area using MATSim". In: *2021 IEEE International Intelligent Transportation Systems Conference (ITSC)*. IEEE. 2021, pp. 3278–3283.

[15] Michael Balmer et al. "Agent-based simulation of travel demand: Structure and computational performance of MATSim-T". In: *Arbeitsberichte Verkehrs-und Raumplanung* 504 (2008).

[16] Ana LC Bazzan. "Aligning individual and collective welfare in complex socio-technical systems by combining metaheuristics and reinforcement learning". In: *Engineering Applications of Artificial Intelligence* 79 (2019), pp. 23–33.

[17] Sarah Bird et al. "Fairlearn: A toolkit for assessing and improving fairness in AI". In: *Microsoft, Tech. Rep. MSR-TR-2020-32* (2020).

[18] Miranda R Blake et al. "An integrated modelling approach examining the influence of goals, habit and learning on choice using visual attention data". In: *Journal of Business Research* 117 (2020), pp. 44–57.

[19] Jean-François Bonnefon, Azim Shariff, and Iyad Rahwan. "The social dilemma of autonomous vehicles". In: *Science* 352.6293 (2016), pp. 1573–1576.

[20] Greg Brockman et al. "Openai gym". In: *arXiv preprint arXiv:1606.01540* (2016).

[21] GE Cantarella and A Di Febbraro. "Transportation Systems with Autonomous Vehicles: models and algorithms for equilibrium assignment". In: *Transportation Research Procedia* 27 (2017), pp. 349–356.

[22] Guido Cantelmo, Rafał Kucharski, and Constantinos Antoniou. "Low-Dimensional Model for Bike-Sharing Demand Forecasting that Explicitly Accounts for Weather Data". In: *Transportation Research Record* 2674.8 (2020), pp. 132–144.

[23] Maria Laura Nunes Carvalho. "Uber, a path for profitability or a market misperception?–Advanced TechnologiesGroup and Other Technology Programs". PhD thesis. 2020.

[24] Oded Cats and Jens West. "Learning and adaptation in dynamic transit assignment models for congested networks". In: *Transportation Research Record* 2674.1 (2020), pp. 113–124.

[25] Oded Cats et al. "Beyond the Dichotomy: How Ride-hailing Competes with and Complements Public Transport". In: *arXiv preprint arXiv:2104.04208* (2021).

[26] Chacha Chen et al. "Toward a thousand lights: Decentralized deep reinforcement learning for large-scale traffic signal control". In: *Proceedings of the AAAI Conference on Artificial Intelligence*. Vol. 34. 04. 2020, pp. 3414–3421.

[27] Le Chen, Alan Mislove, and Christo Wilson. "Peeking beneath the hood of uber". In: *Proceedings of the 2015 internet measurement conference*. 2015, pp. 495–508.

[28] M. Keith Chen. "Dynamic Pricing in a Labor Market: Surge Pricing and Flexible Work on the Uber Platform". In: *Proceedings of the 2016 ACM Conference on Economics and Computation*. EC '16. Maastricht, The Netherlands: Association for Computing Machinery, 2016, p. 455. ISBN: 9781450339360.

[29] Ioannis Vasileios Chremos, Logan E Beaver, and Andreas A Malikopoulos. "A game-theoretic analysis of the social impact of connected and automated vehicles". In: *2020 IEEE 23rd ITSC*. IEEE. 2020, pp. 1–6.

[30] Peter Cohen et al. *Using big data to estimate consumer surplus: The case of uber*. Tech. rep. National Bureau of Economic Research, 2016.

[31] Shadi Djavadian and Joseph YJ Chow. "An agent-based day-to-day adjustment process for modeling 'Mobility as a Service'with a two-sided flexible transport market". In: *Transportation research part B: methodological* 104 (2017), pp. 36–57.

[32] Arkadiusz Drabicki et al. "Modelling the effects of real-time crowding information in urban public transport systems". In: *Transportmetrica A: Transport Science* 17.4 (2021), pp. 675–713.

[33] Ariel Ezrachi. *Virtual competition.* Harvard University Press, 2017.

[34] Andres Fielbaum, Maximilian Kronmueller, and Javier Alonso-Mora. "Anticipatory routing methods for an on-demand ridepooling mobility system". In: *Transportation* (2021), pp. 1–42.

[35] Andres Fielbaum et al. "How to split the costs among travellers sharing a ride? Aligning system's optimum with users' equilibrium". In: *European Journal of Operational Research Follow journal* (2021).

[36] Andrés Fielbaum, Sergio Jara-Diaz, and Antonio Gschwender. "Beyond the Mohring effect: Scale economies induced by transit lines structures design". In: *Economics of Transportation* 22 (2020), p. 100163.

[37] Luciano Floridi. "Establishing the rules for building trustworthy AI". In: *Nature Machine Intelligence* 1.6 (2019), pp. 261–262.

[38] Guido Gentile and Klaus Nökel. "Modelling public transport passenger flows in the era of intelligent transport systems". In: *Springer Tracts on Transportation and Traffic* 10 (2016).

[39] Amir Ghiasi, Xiaopeng Li, and Jiaqi Ma. "A mixed traffic speed harmonization model with connected autonomous vehicles". In: *Transportation Research Part C: Emerging Technologies* 104 (2019), pp. 210–233.

[40] David Gunning et al. "XAI—Explainable artificial intelligence". In: *Science Robotics* 4.37 (2019).

[41] Qiangqiang Guo, Xuegang Jeff Ban, and HM Abdul Aziz. "Mixed traffic flow of human driven vehicles and automated vehicles on dynamic transportation networks". In: *Transportation Research Part C: Emerging Technologies* 128 (2021), p. 103159.

[42] Peter A Hancock, Illah Nourbakhsh, and Jack Stewart. "On the future of transportation in an era of automated and autonomous vehicles". In: *Proceedings of the National Academy of Sciences* 116.16 (2019), pp. 7684–7691.

[43] Alexandre Heuillet, Fabien Couthouis, and Natalia Diaz-Rodriguez. "Explainability in deep reinforcement learning". In: *Knowledge-Based Systems* 214 (2021), p. 106685.

[44] Matt Hoffman et al. "Acme: A Research Framework for Distributed Reinforcement Learning". In: *arXiv preprint arXiv:2006.00979* (2020).

[45] John Holler et al. "Deep reinforcement learning for multi-driver vehicle dispatching and repositioning problem". In: *2019 IEEE International Conference on Data Mining (ICDM)*. IEEE. 2019, pp. 1090–1095.

[46] Skylar R Hopkins et al. "How to identify win–win interventions that benefit human health and conservation". In: *Nature Sustainability* 4.4 (2021), pp. 298–304.

[47] Chao Huang et al. "Reference-free approach for mitigating human–machine conflicts in shared control of automated vehicles". In: *IET Control Theory & Applications* 14.18 (Oct. 2020), pp. 2752–2763.

[48] Takamasa Iryo and David Watling. "Properties of equilibria in transport problems with complex interactions between users". In: *Transportation Research Part B: Methodological* 126 (2019), pp. 87–114.

[49] Max Jaderberg et al. "Human-level performance in 3D multiplayer games with population-based reinforcement learning". In: *Science* 364.6443 (2019), pp. 859–865.

[50] Grace O Kagho, Milos Balac, and Kay W Axhausen. "Agent-based models in transport planning: Current state, issues, and expectations". In: *Procedia Computer Science* 170 (2020), pp. 726–732.

[51] Lukasz Kaiser et al. "Model-based reinforcement learning for atari". In: *arXiv preprint arXiv:1903.00374* (2019).

[52] Ido Klein and Eran Ben-Elia. "Emergence of cooperation in congested road networks using ICT and future and emerging technologies: A game-based review". In: *Transportation Research Part C: Emerging Technologies* 72 (2016), pp. 10–28.

[53] Ido Klein and Eran Ben-Elia. "Emergence of cooperative route-choice: a model and experiment of compliance with system-optimal ATIS". In: *Transportation research part F: traffic psychology and behaviour* 59 (2018), pp. 348–364.

[54] Ido Klein, Nadav Levy, and Eran Ben-Elia. "An agent-based model of the emergence of cooperation and a fair and stable system optimum using ATIS on a simple road network". In: *Transportation research part C: emerging technologies* 86 (2018), pp. 183–201.

[55] Michal Kosinski, David Stillwell, and Thore Graepel. "Private traits and attributes are predictable from digital records of human behavior". In: *Proceedings of the national academy of sciences* 110.15 (2013), pp. 5802–5805.

[56] Anil NP Koushik, M. Manoj, and N. Nezamuddin. "Machine learning applications in activity-travel behaviour research: a review". In: *Transport Reviews* 40.3 (2020), pp. 288–311.

[57] Daniel Krajzewicz. "Traffic simulation with SUMO–simulation of urban mobility". In: *Fundamentals of traffic simulation*. Springer, 2010, pp. 269–293.

[58] Rafał Kucharski and Oded Cats. "Exact matching of attractive shared rides (ExMAS) for system-wide strategic evaluations". In: *Transportation Research Part B: Methodological* 139 (2020), pp. 285–310.

[59] Rafał Kucharski and Oded Cats. "Simulating two-sided mobility platforms with MaaSSim". In: *PloS one* 17.6 (2022), e0269682.

[60] Rafał Kucharski and Guido Gentile. "Indirect observation of rerouting phenomena in traffic networks–case study of Warsaw bridges". In: *Archives of Transport* 32 (2014).

[61] Rafał Kucharski and Guido Gentile. "Simulation of rerouting phenomena in dynamic traffic assignment with the information comply model". In: *Transportation Research Part B: Methodological* 126 (2019), pp. 414–441.

[62] Medha Kumar and Varun Dutt. "Understanding Decisions in Collective Risk Social Dilemma Games Using Reinforcement Learning". In: *IEEE Transactions on Cognitive and Developmental Systems* 12.4 (2020), pp. 824–840.

[63] Vinnet Kumar, Avishek Lahiri, and Orhan Bahadir Dogan. "A strategic framework for a profitable business model in the sharing economy". In: *Industrial Marketing Management* 69 (2018), pp. 147–160.

[64] Daniel A Lazar et al. "Learning how to dynamically route autonomous vehicles on shared roads". In: *Transportation research part C: emerging technologies* 130 (2021), p. 103258.

[65] Joel Z. Leibo et al. "Scalable Evaluation of Multi-Agent Reinforcement Learning with Melting Pot". In: PMLR. 2021.

[66] Michael W Levin. “Congestion-aware system optimal route choice for shared autonomous vehicles”. In: *Transportation Research Part C: Emerging Technologies* 82 (2017), pp. 229–247.

[67] Sen Li et al. “Regulating TNCs: Should Uber and Lyft set their own rules?” In: *Transportation Research Part B: Methodological* 129 (2019), pp. 193–225.

[68] Xi Lin et al. “Pareto multi-task learning”. In: *Advances in neural information processing systems* 32 (2019), pp. 12060–12070.

[69] Changliu Liu et al. “Distributed conflict resolution for connected autonomous vehicles”. In: *IEEE Transactions on Intelligent Vehicles* 3.1 (2017), pp. 18–29.

[70] Ruo-Ze Liu et al. *mini-AlphaStar*. `https://github.com/liuruoze/mini-AlphaStar`. 2021.

[71] Wei Liu. “An equilibrium analysis of commuter parking in the era of autonomous vehicles”. In: *Transportation Research Part C: Emerging Technologies* 92 (2018), pp. 191–207.

[72] Ryan Lowe et al. “Multi-agent actor-critic for mixed cooperative-competitive environments”. In: *arXiv preprint arXiv:1706.02275* (2017).

[73] Gongyuan Lu et al. “Trajectory-based traffic management inside an autonomous vehicle zone”. In: *Transportation Research Part B: Methodological* 120 (2019), pp. 76–98. ISSN: 0191-2615.

[74] Renzhi Lu, Seung Ho Hong, and Xiongfeng Zhang. “A dynamic pricing demand response algorithm for smart grid: reinforcement learning approach”. In: *Applied Energy* 220 (2018), pp. 220–230.

[75] Arwa Mahdawi. *Is your friend getting a cheaper Uber fare than you are?* 2018. URL: `https://www.theguardian.com/commentisfree/2018/apr/13/uber-lyft-prices-personalized-data` (visited on 12/12/2021).

[76] Guilhem Mariotte et al. “Assessing traveler compliance with the social optimum: A stated preference study”. In: *Travel behaviour and society* 23 (2021), pp. 177–191.

[77] Sandra C Matz et al. “Psychological targeting as an effective approach to digital mass persuasion”. In: *Proceedings of the national academy of sciences* 114.48 (2017), pp. 12714–12719.

[78] Negar Mehr and Roberto Horowitz. “How will the presence of autonomous vehicles affect the equilibrium state of traffic networks?” In: *IEEE Transactions on Control of Network Systems* 7.1 (2019), pp. 96–105.

[79] Adam Millard-Ball. “Pedestrians, autonomous vehicles, and cities”. In: *Journal of planning education and research* 38.1 (2018), pp. 6–12.

[80] Brent Mittelstadt. “Principles alone cannot guarantee ethical AI”. In: *Nature Machine Intelligence* 1.11 (2019), pp. 501–507.

[81] Volodymyr Mnih et al. “Human-level control through deep reinforcement learning”. In: *nature* 518.7540 (2015), pp. 529–533.

[82] Luis Moreira-Matias et al. “An online learning approach to eliminate Bus Bunching in real-time”. In: *Applied Soft Computing* 47 (2016), pp. 460–482.

[83] Carlos Moreno et al. “Introducing the ”15-Minute City”: Sustainability, Resilience and Place Identity in Future Post-Pandemic Cities”. In: *Smart Cities* 4.1 (2021), pp. 93–111. ISSN: 2624-6511.

[84] Santhanakrishnan Narayanan, Emmanouil Chaniotakis, and Constantinos Antoniou. “Shared autonomous vehicle services: A comprehensive review”. In: *Transportation Research Part C: Emerging Technologies* 111 (2020), pp. 255–293.

[85] Akshat Pandey and Aylin Caliskan. “Disparate Impact of Artificial Intelligence Bias in Ridehailing Economy’s Price Discrimination Algorithms”. In: *Proceedings of the 2021 AAAI/ACM Conference on AI, Ethics, and Society*. 2021, pp. 822–833.

[86] Jacek Pawlak, John W Polak, and Aruna Sivakumar. “A framework for joint modelling of activity choice, duration, and productivity while travelling”. In: *Transportation Research Part B: Methodological* 106 (2017), pp. 153–172.

[87] Lukas M Schmidt et al. “Can You Trust Your Autonomous Car? Interpretable and Verifiably Safe Reinforcement Learning”. In: *2021 IEEE Intelligent Vehicles Symposium (IV)*. IEEE. 2021, pp. 171–178.

[88] Wilko Schwarting et al. “Social behavior for autonomous vehicles”. In: *Proceedings of the National Academy of Sciences* 116.50 (2019), pp. 24972–24978.

[89] Jing-Cheng Shi et al. “Virtual-taobao: Virtualizing real-world online retail environment for reinforcement learning”. In: *Proceedings of the AAAI Conference on Artificial Intelligence*. Vol. 33. 01. 2019, pp. 4902–4909.

[90] Zhenyu Shou and Xuan Di. “Reward design for driver repositioning using multi-agent reinforcement learning”. In: *Transportation research part C: emerging technologies* 119 (2020), p. 102738.

[91] David Silver et al. “Mastering the game of go without human knowledge”. In: *nature* 550.7676 (2017), pp. 354–359.

[92] Clemens Stachl et al. “Predicting personality from patterns of behavior collected with smartphones”. In: *Proceedings of the National Academy of Sciences* 117.30 (2020), pp. 17680–17687.

[93] Raphael E Stern et al. “Dissipation of stop-and-go waves via control of autonomous vehicles: Field experiments”. In: *Transportation Research Part C: Emerging Technologies* 89 (2018), pp. 205–221.

[94] Adam Stooke et al. “Open-ended learning leads to generally capable agents”. In: *arXiv preprint arXiv:2107.12808* (2021).

[95] Liting Sun, Wei Zhan, and Masayoshi Tomizuka. “Probabilistic prediction of interactive driving behavior via hierarchical inverse reinforcement learning”. In: *2018 21st International Conference on Intelligent Transportation Systems (ITSC)*. IEEE. 2018, pp. 2111–2117.

[96] Zhanbo Sun, Tianyu Huang, and Peitong Zhang. “Cooperative decision-making for mixed traffic: A ramp merging example”. In: *Transportation research part C: emerging technologies* 120 (2020), p. 102764.

[97] Alireza Talebpour and Hani S Mahmassani. “Influence of connected and autonomous vehicles on traffic flow stability and throughput”. In: *Transportation Research Part C: Emerging Technologies* 71 (2016), pp. 143–163.

[98] Miguel Teixeira, Pedro M d’Orey, and Zafeiris Kokkinogenis. “Simulating collective decision-making for autonomous vehicles coordination enabled by vehicular networks: A computational social choice perspective”. In: *Simulation Modelling Practice and Theory* 98 (2020), p. 101983.

[99] Berkay Turan, Ramtin Pedarsani, and Mahnoosh Alizadeh. “Dynamic pricing and fleet management for electric autonomous mobility on demand systems”. In: *Transportation Research Part C: Emerging Technologies* 121 (2020), p. 102829.

[100] Bart Van Arem, Cornelie JG Van Driel, and Ruben Visser. “The impact of cooperative adaptive cruise control on traffic-flow characteristics”. In: *IEEE Transactions on intelligent transportation systems* 7.4 (2006), pp. 429–436.

[101] Eugene Vinitsky et al. “Benchmarks for reinforcement learning in mixed-autonomy traffic”. In: *Conference on robot learning*. PMLR. 2018, pp. 399–409.

[102] Ricardo Vinuesa et al. “The role of artificial intelligence in achieving the Sustainable Development Goals”. In: *Nature communications* 11.1 (2020), pp. 1–10.

[103] Oriol Vinyals et al. “Grandmaster level in StarCraft II using multi-agent reinforcement learning”. In: *Nature* 575.7782 (2019), pp. 350–354.

[104] Jian Wang, Srinivas Peeta, and Xiaozheng He. “Multiclass traffic assignment model for mixed traffic flow of human-driven vehicles and connected and autonomous vehicles”. In: *Transportation Research Part B: Methodological* 126 (2019), pp. 139–168.

[105] Lei Wang et al. “Multi-AI competing and winning against humans in iterated Rock-Paper-Scissors game”. In: *Scientific Reports* 10.1 (2020), pp. 1–8.

[106] John Glen Wardrop. “Road paper. some theoretical aspects of road traffic research.” In: *Proceedings of the institution of civil engineers* 1.3 (1952), pp. 325–362.

[107] E Glen Weyl. “A price theory of multi-sided platforms”. In: *American Economic Review* 100.4 (2010), pp. 1642–72.

[108] Maciej Wołczyk et al. “Zero Time Waste: Recycling Predictions in Early Exit Neural Networks”. In: *arXiv preprint arXiv:2106.05409* (2021).

[109] David H Wolpert and Kagan Tumer. “Collective intelligence, data routing and braess’ paradox”. In: *Journal of Artificial Intelligence Research* 16 (2002), pp. 359–387.

[110] Cathy Wu et al. “Emergent behaviors in mixed-autonomy traffic”. In: *Conference on Robot Learning*. PMLR. 2017, pp. 398–407.

[111] Cathy Wu et al. “Flow: Architecture and benchmarking for reinforcement learning in traffic control”. In: *arXiv preprint arXiv:1710.05465* 10 (2017).

[112] Jinhao Xi et al. “DDRL: A Decentralized Deep Reinforcement Learning Method for Vehicle Repositioning”. In: *2021 IEEE International Intelligent Transportation Systems Conference (ITSC)*. IEEE. 2021, pp. 3984–3989.

[113] Runzhe Yang, Xingyuan Sun, and Karthik Narasimhan. “A generalized algorithm for multi-objective reinforcement learning and policy adaptation”. In: *arXiv preprint arXiv:1908.08342* (2019).

[114] Menno Yap, Oded Cats, and Bart van Arem. “Crowding valuation in urban tram and bus transportation based on smart card data”. In: *Transportmetrica A: Transport Science* 16.1 (2020), pp. 23–42.

[115] Hongbo Ye, Feng Xiao, and Hai Yang. “Exploration of day-to-day route choice models by a virtual experiment”. In: *Transportation Research Part C: Emerging Technologies* 94 (2018), pp. 220–235.

[116] Lanhang Ye and Toshiyuki Yamamoto. “Evaluating the impact of connected and autonomous vehicles on traffic safety”. In: *Physica A: Statistical Mechanics and its Applications* 526 (2019), p. 121009.

[117] Fang Zhang, Jian Lu, and Xiaojian Hu. “Traffic equilibrium for mixed traffic flows of human-driven vehicles and connected and autonomous vehicles in transportation networks under tradable credit scheme”. In: *Journal of advanced transportation* 2020 (2020).

[118] Yue J Zhang, Andreas A Malikopoulos, and Christos G Cassandras. “Optimal control and coordination of connected and automated vehicles at urban traffic intersections”. In: *2016 American Control Conference (ACC)*. IEEE. 2016, pp. 6227–6232.

[119] Xilei Zhao et al. “Prediction and behavioral analysis of travel mode choice: A comparison of machine learning and logit models”. In: *Travel behaviour and society* 20 (2020), pp. 22–35.

[120] Bo Zhou et al. “A reinforcement learning scheme for the equilibrium of the in-vehicle route choice problem based on congestion game”. In: *Applied Mathematics and Computation* 371 (2020), p. 124895.

[121] Chengxiang Zhuge et al. “An improvement in MATSim computing time for large-scale travel behaviour microsimulation”. In: *Transportation* 48.1 (2021), pp. 193–214.