

REFERENCES

- [1] K. N. ab and A. H. Abdullah, "A survey on intelligent transportation systems," *Middle East J Sci Res*, vol. 15, no. 5, pp. 629–642, 2013, doi: 10.5829/idosi.mejsr.2013.15.5.11215.
- [2] M. Paradowska, "Intelligent transport systems as an instrument for sustainable development," *Economic and Environmental Studies*, vol. 11, no. 4, pp. 389–403, 2011.
- [3] R. Mangiaracina, A. Perego, G. Salvadori, and A. Tumino, "A comprehensive view of intelligent transport systems for urban smart mobility," Jan. 02, 2017, *Taylor and Francis Ltd*. doi: 10.1080/13675567.2016.1241220.
- [4] T. Kanagasabai, N. Nishanthan, K. Thiruthanigesan, and P. Georgakis, "Towards the development of intelligent transportation systems in sri lanka," *Article in International Journal of Scientific & Technology Research*, vol. 6, 2017, [Online]. Available: www.ijstr.org
- [5] N. Servos, X. Liu, M. Teucke, and M. Freitag, "travel time prediction in a multimodal freight transport relation using machine learning algorithms," *Logistics*, vol. 4, no. 1, Mar. 2020, doi: 10.3390/logistics4010001.
- [6] P. Kumar and S. Suman, "Public transportation systems with its technologies," in *Proceedings of civil engineering conference- innovation without limits*, Sep. 2009.[Online].Available: <https://www.researchgate.net/publication/344780710>
- [7] R. G. Mishalani, S. Lee, and M. R. McCord, "Evaluating real-time bus arrival information systems," *Transportation Research Record: Journal of the Transportation Research Board*, vol. 1731, no. 1, pp. 81–87, Jan. 2000, doi: 10.3141/1731-10.
- [8] A. Millonig, M. Sleszynski, and M. Ulm, "Sitting, waiting, wishing: waiting time perception in public transport," in *2012 15th International IEEE Conference on Intelligent Transportation Systems*, IEEE, Sep. 2012, pp. 1852–1857. doi: 10.1109/ITSC.2012.6338777.
- [9] L. Perera, N. Jayasooriya, and G. Rajapaksha, "Assessment of park and ride acceptability of users in developing countries using discrete choice experiment," *Advances in Transportation Studies: an international Journal*, vol. 55, p. 235, 2021.

- [10] Z. Gurmu and W. Fan, "Artificial neural network travel time prediction model for buses using only GPS data," *J Public Trans*, vol. 17, no. 2, pp. 45–65, Jun. 2014, doi: 10.5038/2375-0901.17.2.3.
- [11] N. Servos, X. Liu, M. Teucke, and M. Freitag, "Travel time prediction in a multimodal freight transport relation using machine learning algorithms," *Logistics*, vol. 4, no. 1, p. 1, Dec. 2019, doi: 10.3390/logistics4010001.
- [12] M. Čelan and M. Lep, "Bus-arrival time prediction using bus network data model and time periods," *Future Generation Computer Systems*, vol. 110, pp. 364–371, Sep. 2020, doi: 10.1016/j.future.2018.04.077.
- [13] O. Cats and G. Loutos, "Evaluating the added-value of online bus arrival prediction schemes," *Transp Res Part A Policy Pract*, vol. 86, pp. 35–55, Apr. 2016, doi: 10.1016/j.tra.2016.02.004.
- [14] H. Zhang, S. Liang, Y. Han, M. Ma, and R. Leng, "A prediction model for bus arrival time at bus stop considering signal control and surrounding traffic flow," *IEEE Access*, vol. 8, pp. 127672–127681, 2020, doi: 10.1109/ACCESS.2020.3004856.
- [15] G. S. Galappaththi and S. Lanka, "Estimating travel time for un-signalized two lane highways in sri lanka," University of Moratuwa, Moratuwa, 2016.
- [16] R. Jeong and L. R. Rilett, "Bus arrival time prediction using artificial neural network model," in *IEEE Intelligent Transportation Systems Conference*, Washington D.C., Oct. 2004, pp. 988–993.
- [17] L. Vanajakshi, S. C. Subramanian, and R. Sivanandan, "Travel time prediction under heterogeneous traffic conditions using global positioning system data from buses," *IET Intelligent Transport Systems*, vol. 3, no. 1, pp. 1–9, 2009, doi: 10.1049/iet-its:20080013.
- [18] D. N. D. Jayaratne, C. J. Vidanapathirana, and H. R. Pasindu, "Challenges faced in heterogeneous traffic data collection: A comparison of traffic data collection technologies," *J Natl Sci Found*, vol. 48, no. 3, pp. 227–237, 2020, doi: 10.4038/jnsfsr.v48i3.8803.
- [19] B. Dhivyabharathi, B. A. Kumar, and L. Vanajakshi, "Real-time bus arrival time prediction system under Indian traffic conditions," in *2016 IEEE International Conference on Intelligent Transportation Engineering (ICITE)*, IEEE, Aug. 2016, pp. 18–22. doi: 10.1109/ICITE.2016.7581300.

- [20] N. C. Petersen, F. Rodrigues, and F. C. Pereira, "Multi-output bus travel time prediction with convolutional LSTM neural network," *Expert Syst Appl*, vol. 120, pp. 426–435, Apr. 2019, doi: 10.1016/j.eswa.2018.11.028.
- [21] N. Julio, R. Giesen, and P. Lizana, "Real-time prediction of bus travel speeds using traffic shockwaves and machine learning algorithms," *Research in Transportation Economics*, vol. 59, pp. 250–257, Nov. 2016, doi: 10.1016/j.retrec.2016.07.019.
- [22] S. J. Barbeau, "Quality control - lessons learned from the development and evaluation of GTFS-realtime feeds," in *97th Annual Meeting of the Transportation Research Board*, Washington DC, Nov. 2017.
- [23] A. M. Abdelfattah and M. K. Ata, "Models for predicting bus delays," *Transportation Research Record*, vol. 1623, no. 1, pp. 8–15, 1998.
- [24] D. Panovski and T. Zaharia, "Long and short-term bus arrival time prediction with traffic density matrix," *IEEE Access*, vol. 8, pp. 226267–226284, 2020, doi: 10.1109/ACCESS.2020.3044173.
- [25] L. Ye, P. Thiengburanathum, and P. Thiengburanathum, "A conceptual framework for bus arrival prediction based on spark framework and machine learning approaches," in *2020 Joint International Conference on Digital Arts, Media and Technology with ECTI Northern Section Conference on Electrical, Electronics, Computer and Telecommunications Engineering (ECTI DAMT & NCON)*, IEEE, Mar. 2020, pp. 216–221. doi: 10.1109/ECTIDAMTNCN48261.2020.9090693.
- [26] M. Altinkaya and M. Zontul, "Urban Bus Arrival Time Prediction: A review of computational models," *International Journal of Recent Technology and Engineering (IJRTE)*, vol. 2, no. 4, pp. 164–169, 2013.
- [27] O. Eriksson and F. Andres, "Intelligent transport systems and services supported by standards," in *9th World Congress on Intelligent Transport Systems*, Chicago, Oct. 2002.
- [28] M. L. Mfenjou, A. A. Abba Ari, W. Abdou, F. Spies, and Kolyang, "Methodology and trends for an intelligent transport system in developing countries," *Sustainable Computing: Informatics and Systems*, vol. 19, pp. 96–111, Sep. 2018, doi: 10.1016/j.suscom.2018.08.002.
- [29] A. E. Coronado Mondragon, C. S. Lalwani, E. S. Coronado Mondragon, C. E. Coronado Mondragon, and K. S. Pawar, "Intelligent transport systems in multimodal logistics: A case of role and contribution through wireless vehicular

- networks in a sea port location,” *Int J Prod Econ*, vol. 137, no. 1, pp. 165–175, May 2012, doi: 10.1016/j.ijpe.2011.11.006.
- [30] W. H. K. Lam, “Special issue: Intelligent transportation systems,” *J Adv Transp*, vol. 36, no. 3, pp. 225–229, Sep. 2002, doi: 10.1002/atr.5670360302.
 - [31] N. R. Velaga, M. Quddus, and A. L. Bristow, “Detecting and correcting map-matching errors in location-based intelligent transport systems,” in *12th World Conference on Transport Research Society (WCTRS)*, Jul. 2010. [Online]. Available: <https://www.researchgate.net/publication/229019661>
 - [32] S. Stephenson, T. Moore, T. Edwards, X. Meng, and A. Baxendale, “Accuracy requirements and benchmarking position solutions for intelligent transportation location-based services,” in *Proceedings of the 8th International Symposium of Location-Based Services*, Nov. 2011. [Online]. Available: <https://www.researchgate.net/publication/260000200>
 - [33] M. Wigan and R. Clarke, “Transport and surveillance aspects of location-based services,” *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2105, no. 1, pp. 92–99, Jan. 2009, doi: 10.3141/2105-12.
 - [34] D. H. Stojanovic and S. J. Djordjevic-Kajan, “Developing location-based services from a GIS perspective,” in *5th International Conference on Telecommunications in Modern Satellite, Cable and Broadcasting Service. TELSIKS 2001. Proceedings of Papers (Cat. No.01EX517)*, IEEE, pp. 459–462. doi: 10.1109/TELSKS.2001.955819.
 - [35] A. Dey, “Location-based services,” in *A Dictionary of Transport Analysis*, CRC Press, 2010, pp. 247–249. doi: 10.1201/9781439812273-18.
 - [36] M. J. W. A. Vanderschuren, “The benefits of intelligent transport systems: modelling the effects of different its systems,” Pretoria, 2003.
 - [37] M. J. W. A. Vanderschuren, “Intelligent transport systems for south africa : impact assessment through microscopic simulation in the south african context,” 2006.
 - [38] K. N. Qureshi and A. H. Abdullah, “A survey on intelligent transportation systems,” *Middle East J Sci Res*, vol. 15, no. 5, pp. 629–642, 2013, doi: 10.5829/idosi.mejsr.2013.15.5.11215.
 - [39] A. Jarašūniene, “Research into intelligent transport systems (ITS) technologies and efficiency,” *Transport*, vol. 22, no. 2, pp. 61–67, Jan. 2007, doi: 10.1080/16484142.2007.9638100.

- [40] Y. Xing *et al.*, “Identification and analysis of driver postures for in-vehicle driving activities and secondary tasks recognition,” *IEEE Trans Comput Soc Syst*, vol. 5, no. 1, pp. 95–108, 2017.
- [41] R. Labayrade, “How autonomous mapping can help a road lane detection system ?,” in *9th International Conference on Control, Automation, Robotics and Vision*, IEEE, 2006, pp. 1–6. doi: 10.1109/ICARCV.2006.345202.
- [42] Z. Tao, P. Bonnifait, V. Fremont, and J. Ibanez-Guzman, “Mapping and localization using GPS, lane markings and proprioceptive sensors,” in *IEEE/RSJ International Conference on Intelligent Robots and Systems*, IEEE, Nov. 2013, pp. 406–412. doi: 10.1109/IROS.2013.6696383.
- [43] M. Shahgholian and D. Gharavian, “Advanced traffic management systems: an overview and a development strategy,” *Electrical Engineering and Systems Science*, Oct. 2018.
- [44] A. B. Nkoro and Y. A. Vershinin, “Current and future trends in applications of Intelligent Transport Systems on cars and infrastructure,” in *17th International IEEE Conference on Intelligent Transportation Systems (ITSC)*, IEEE, Oct. 2014, pp. 514–519. doi: 10.1109/ITSC.2014.6957741.
- [45] A. Linder, A. Kircher, A. Vadeby, and S. Nygardhs, “Intelligent Transport Systems (ITS) in passenger cars and methods for assessment of traffic safety impact: a literature review,” Linköping, 2007.
- [46] G. Giannopoulos, E. Mitsakis, J. M. Salanova, Dilara. P, P. Bonnel, and V. Punzo, “Overview of Intelligent Transport Systems (ITS),” in *JRC Scientific and Policy Reports*, vol. 1, 2012.
- [47] M. Lu *et al.*, “Cooperative and connected intelligent transport systems for sustainable european road transport,” in *Transport Research Arena (TRA)*, Apr. 2018.
- [48] S. Kurihara, H. Tamaki, M. Numao, J. Yano, K. Kagawa, and T. Morita, “Traffic congestion forecasting based on pheromone communication model for intelligent transport systems,” in *2009 IEEE Congress on Evolutionary Computation*, IEEE, May 2009, pp. 2879–2884. doi: 10.1109/CEC.2009.4983304.
- [49] T. Binjammaz, A. Al-Bayatti, and A. Al-Hargan, “GPS integrity monitoring for an intelligent transport system,” in *2013 10th Workshop on Positioning, Navigation and Communication (WPNC)*, IEEE, Mar. 2013, pp. 1–6. doi: 10.1109/WPNC.2013.6533268.

- [50] P. Boccardo, F. Arneodo, and D. Botta, "Application of geomatic techniques in infomobility and intelligent transport systems (ITS)," *Eur J Remote Sens*, vol. 47, no. 1, pp. 95–115, Apr. 2014, doi: 10.5721/EuJRS20144707.
- [51] B. Kádár and M. Gede, "Where do tourists go? Visualizing and analysing the spatial distribution of geotagged photography," *Cartographica*, vol. 48, no. 2, pp. 78–88, Jan. 2013, doi: 10.3138/carto.48.2.1839.
- [52] W. H. K. Lam, "Development of intelligent transport systems in Hong Kong," in *ITSC 2001. 2001 IEEE Intelligent Transportation Systems. Proceedings (Cat. No.01TH8585)*, IEEE, pp. 1000–1005. doi: 10.1109/ITSC.2001.948798.
- [53] M. Seredynski, D. Khadraoui, and F. Viti, "Signal Phase and Timing (SPaT) for cooperative public transport priority measures," in *22nd ITS World Congress*, Oct. 2015.
- [54] N. Hounsell and G. Wall, "New intelligent transport systems applications in europe to improve bus services," *Transportation Research Record : Journal of Transportation Research Board*, vol. 02, pp. 85–91, 1997.
- [55] M. Friedrich, F. Leurent, I. Jackiva, V. Fini, and S. Raveau, "From transit systems to models: purpose of modelling," in *Modelling Public Transport Passenger Flows in the Era of Intelligent Transport Systems, Springer Tracts on Transportation and Traffic*, 2016, pp. 131–234. doi: 10.1007/978-3-319-25082-3_4.
- [56] O. S. Abejide, J. A. Adedayo, and M. H. Mohamed, "Intelligent transportation system as an effective remedy to improve the public transportation in south africa," 2018.
- [57] A. Mewada, S. Tanwar, and Z. Narmawala, "Comparison and evaluation of real time reservation technologies in the intelligent public transport system," in *2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC)*, IEEE, Dec. 2018, pp. 800–805. doi: 10.1109/PDGC.2018.8745888.
- [58] S. D. Maclean and D. J. Dailey, "Busview: a graphical transit information system," in *ITSC 2001. 2001 IEEE Intelligent Transportation Systems. Proceedings (Cat. No.01TH8585)*, IEEE, pp. 1073–1078. doi: 10.1109/ITSC.2001.948811.
- [59] B. Ferris, K. Watkins, and A. Borning, "OneBusAway: A transit traveler information system," 2010, pp. 92–106. doi: 10.1007/978-3-642-12607-9_7.

- [60] K. Rehrl, N. Göll, S. Leitinger, S. Bruntsch, and H.-J. Mentz, "Smartphone-based information and navigation aids for public transport travelers." [Online]. Available: <http://www.vor.at/>
- [61] I. Jeon, M. Lee, and C. Jun, "A simulation method for adjustment of public transportation routes using geotagged smart card data," 2019, doi: 10.34726/lbs2019.41.
- [62] P. Ranasinghe, T. Dammalage, and G. Retscher, "A low-cost public transport tracking and information system for commuters in sri lanka," in *LBS 2019: Adjunct Proceedings of the 15th International Conference on Location-Based Services*, 2019.
- [63] L. O. Neverauskiene, M. Novikova, and E. Kazlauskiene, "Factors determining the development of intelligent transport systems," *Business, Management and Economics Engineering*, vol. 19, no. 2, pp. 229–243, 2021.
- [64] N. Smith, L. Marquez, and J. Gannon, "Realizing the potential environmental benefits of intelligent transport systems," in *Intelligent Transportation Society of America - 12th World Congress on Intelligent Transport Systems*, Nov. 2009, pp. 2082–2093.
- [65] L. Janusova and S. Cicmancova, "Improving safety of transportation by using intelligent transport systems," *Procedia Eng*, vol. 134, pp. 14–12, Jan. 2016.
- [66] M. A. Toulouki, E. I. Vlahogianni, and K. Gkritza, "Perceived socio-economic impacts of cooperate intelligent transportation systems; A case study of greek urban road networks," in *5th IEEE International Conference on Models and Technologies for Intelligent Transportation Systems*, 2017, pp. 730–737.
- [67] B. Kolosz and S. Grant-Muller, "Extending cost–benefit analysis for the sustainability impact of inter-urban intelligent transport systems," *Environ Impact Assess Rev*, vol. 50, pp. 167–177, Jan. 2015, doi: 10.1016/j.eiar.2014.10.006.
- [68] A. Stevens, "The applications and limitations of Cost-Benefits Assessments (CBA) for intelligent transport systems," *Reseach in Transportation Economics*, vol. 8, pp. 91–111, 2004.
- [69] H. R. Smith, B. Hemily, and M. Ivanovic, *Transit Signal Priority (TSP): A Planning and Implementation Handbook*. 2005.
- [70] D. Fayaz, "Intelligent transport system - A review," Electronic Resource.

- [71] R. Liu and T. James, "Microsimulation modelling of intelligent speed adaptation systems," in *PTRC-PUBLICATIONS-P*, 2000, pp. 89–100.
- [72] K. Borre, "Global Navigation Satellite Systems (GNSS) and Intelligent Transportation Systems (ITS)," 2019
- [73] K. Jaisingh, K. El-Khatib, and R. Akalu, "Paving the way for Intelligent Transport Systems (ITS)," in *Proceedings of the 6th ACM Symposium on Development and Analysis of Intelligent Vehicular Networks and Applications*, New York, NY, USA: ACM, Nov. 2016, pp. 25–31. doi: 10.1145/2989275.2989283.
- [74] L. Beer, Z. Mayba, and M. Mokonyama, "The use of dracula microscope modelling in the evaluation of public transport priority measures on the soweto to parktown corridor," in *24th Annayal South African Transport Conference*, Pretoria, 2005, pp. 11–13.
- [75] S. Elkosantini and S. Darmoul, "Intelligent public transportation systems: a review of architectures and enabling technologies," in *2013 International Conference on Advanced Logistics and Transport*, IEEE, May 2013, pp. 233–238. doi: 10.1109/ICAdLT.2013.6568465.
- [76] J. Roux and C. Bester, "The performance of the high occupancy vehicle near Cape Town," in *21st Annual South African Transport Conference*, Pretoria (SA), 2002.
- [77] C. H. Wu, J. M. Ho, and D. T. Lee, "Travel-time prediction with support vector regression," in *IEEE Transactions on Intelligent Transportation Systems*, Dec. 2004, pp. 276–281. doi: 10.1109/TITS.2004.837813.
- [78] S. Arhin and R. Z. Zeola, "Transit bus travel time prediction using AVL data; transit bus travel time prediction using AVL data," *International Journal of Engineering Research and Technology (IJERT)*, vol. 5, no. 12, pp. 21–26, Dec. 2016, [Online]. Available: www.ijert.org
- [79] H. Liu, H. Xu, Y. Yan, Z. Cai, T. Sun, and W. Li, "Bus arrival time prediction based on LSTM and spatial-temporal feature vector," *IEEE Access*, vol. 8, pp. 11917–11929, 2020, doi: 10.1109/ACCESS.2020.2965094.
- [80] S. I.-J. Chien, Y. Ding, and C. Wei, "Dynamic bus arrival time prediction with artificial neural networks," *J Transp Eng*, vol. 128, no. 5, pp. 429–438, Sep. 2002, doi: 10.1061/(ASCE)0733-947X(2002)128:5(429).
- [81] J. Wang, F. Qiao, and J. Lu, "Research and application of the location information in intelligent transportation," 2013.

- [82] R. Md Noor *et al.*, “Predict arrival time by using machine learning algorithm to promote utilization of urban smart bus,” 2020, doi: 10.20944/preprints202002.0197.v1.
- [83] J. Pan, X. Dai, X. Xu, and Y. Li, “A self-learning algorithm for predicting bus arrival time based on historical data model,” in *2012 IEEE 2nd International Conference on Cloud Computing and Intelligence Systems*, IEEE, Oct. 2012, pp. 1112–1116. doi: 10.1109/CCIS.2012.6664555.
- [84] A. Shalaby and A. Farhan, “Prediction model of bus arrival and departure times using AVL and APC data,” *J Public Trans*, vol. 7, no. 1, 2004.
- [85] B. M. Williams and L. A. Hoel, “Modeling and forecasting vehicular traffic flow as a seasonal arima process: theoretical basis and empirical results,” *J Transp Eng*, vol. 129, no. 6, pp. 664–672, Nov. 2003.
- [86] P. Ranjitkar, L. S. Tey, E. Chakravorty, and K. L. Hurley, “Bus arrival time modeling based on auckland data,” *Transp Res Rec*, vol. 2673, no. 6, pp. 1–9, Jun. 2019, doi: 10.1177/0361198119840620.
- [87] J. Patnaik, S. Chien, and A. Bladikas, “Estimation of bus arrival times using APC data,” *J Public Trans*, vol. 7, no. 1, pp. 1–20, Mar. 2004, doi: 10.5038/2375-0901.7.1.1.
- [88] C.-T. Lam, B. Ng, and S. H. Leong, “Prediction of bus arrival time using real-time on-line bus locations,” in *2019 IEEE 19th International Conference on Communication Technology (ICCT)*, IEEE, Oct. 2019, pp. 473–478. doi: 10.1109/ICCT46805.2019.8947251.
- [89] N. C. Petersen, F. Rodrigues, and F. C. Pereira, “Multi-output deep learning for bus arrival time predictions,” in *Transportation Research Procedia*, Elsevier B.V., 2019, pp. 138–145. doi: 10.1016/j.trpro.2019.09.025.
- [90] D. Panovski and T. Zaharia, “Long and short-term bus arrival time prediction with traffic density matrix,” *IEEE Access*, vol. 8, pp. 226267–226284, 2020, doi: 10.1109/ACCESS.2020.3044173.
- [91] P. Balasubramanian and R. Rao, “An adaptive long-term bus arrival time prediction model with cyclic variations,” *J Public Trans*, vol. 18, no. 1, pp. 1–18, Mar. 2015, doi: 10.5038/2375-0901.18.1.6.
- [92] M. P. D’Angelo, H. M. Al-Deek, and M. C. Wang, “Travel-time prediction for freeway corridors,” *Transportation Research Record: Journal of the Transportation Research Board*, vol. 1676, no. 1, pp. 184–191, Jan. 1999, doi: 10.3141/1676-23.

- [93] Y. Bin, Y. Zhongzhen, and Y. Baozhen, "Bus arrival time prediction using support vector machines," *Journal of Intelligent Transportation Systems: Technology, Planning, and Operations*, vol. 10, no. 4, pp. 151–158, Dec. 2006, doi: 10.1080/15472450600981009.
- [94] M. Chowdhury, A. Sadek, K. Ma, N. Kanhere, and P. Bhavsar, "Applications of artificial intelligence paradigms to decision support in real-time traffic management," *Transport Research Record*, vol. 1968, no. 1, pp. 92–98, 2006.
- [96] O. A. Montesinos López, A. Montesinos López, and J. Crossa, *Multivariate Statistical Machine Learning Methods for Genomic Prediction*. Springer International Publishing, 2022. doi: 10.1007/978-3-030-89010-0.
- [97] L. P. Masiero, M. A. Casanova, and M. T. M. de Carvalho, "Travel time prediction using machine learning," in *Proceedings of the 4th ACM SIGSPATIAL International Workshop on Computational Transportation Science*, New York, NY, USA: ACM, Nov. 2011, pp. 34–38. doi: 10.1145/2068984.2068991.
- [98] T. Yin, G. Zhong, J. Zhang, S. He, and B. Ran, "A prediction model of bus arrival time at stops with multi-routes," *Transportation Research Procedia*, vol. 25, pp. 4623–4636, 2017, doi: 10.1016/j.trpro.2017.05.381.
- [99] B. Yu, W. H. K. Lam, and M. L. Tam, "Bus arrival time prediction at bus stop with multiple routes," *Transp Res Part C Emerg Technol*, vol. 19, no. 6, pp. 1157–1170, 2011, doi: 10.1016/j.trc.2011.01.003.
- [100] J. Gong, M. Liu, and S. Zhang, "Hybrid dynamic prediction model of bus arrival time based on weighted of historical and real-time GPS data," in *2013 25th Chinese Control and Decision Conference (CCDC)*, IEEE, May 2013, pp. 972–976. doi: 10.1109/CCDC.2013.6561064.
- [101] M. Ali, M. Zaki, I. Ashour, M. Zorkany, and B. Hesham, "Online bus arrival time prediction using hybrid neural network and kalman filter techniques," *International Journal of Modern Engineering Research (IJMER)* www.ijmer.com, vol. 3, [Online]. Available: www.ijmer.com
- [102] R. P. S. Padmanaban, K. Divakar, L. Vanajakshi, and S. C. Subramanian, "Development of a real-time bus arrival prediction system for Indian traffic conditions," *IET Intelligent Transport Systems*, vol. 4, no. 3, pp. 189–200, Sep. 2010, doi: 10.1049/iet-its.2009.0079.

- [103] Y. Li, C. Huang, and J. Jiang, "Research of bus arrival prediction model based on GPS and SVM," in *2018 Chinese Control And Decision Conference (CCDC)*, IEEE, Jun. 2018, pp. 575–579. doi: 10.1109/CCDC.2018.8407197.
- [104] Y. Chen, M. Guizani, Y. Zhang, L. Wang, N. Crespi, and G. M. Lee, "When traffic flow prediction and wireless big data analytics meet IEEE," *IEEE Netw*, vol. 33, no. 3, pp. 161–167, 2019.
- [105] L. Zhu, S. Shu, and L. Zou, "XGBoost-based travel time prediction between bus stations and analysis of influencing factors," *Wirel Commun Mob Comput*, vol. 2022, pp. 1–25, Jul. 2022, doi: 10.1155/2022/3504704.
- [106] Jinglin Li, Jie Gao, Yu Yang, and Heran Wei, "Bus arrival time prediction based on mixed model," *China Communications*, vol. 14, no. 5, pp. 38–47, May 2017, doi: 10.1109/CC.2017.7942193.
- [107] L. Jian, "Bus arrival time prediction based on Random Forest," *Advances in Engineering Research (AER) : 5th International Conference on Frontiers of Manufacturing Science and Measuring Technology (FMSMT)*, vol. 130, pp. 867–872, 2017.
- [108] Y. Zhang and A. Haghani, "A gradient boosting method to improve travel time prediction," *Transp Res Part C Emerg Technol*, vol. 58, pp. 308–324, Sep. 2015, doi: 10.1016/j.trc.2015.02.019.
- [109] L. Kisgyorgy and L. Rillet, "Travel Time Prediction by Advanced Neural Network," *Periodica Polytechnica Civil Engineering*, vol. 46, no. 1, pp. 15–32, 2002.
- [110] J. Li, "Bus arrival time prediction based on Random Forest," in *Proceedings of the 2017 5th International Conference on Frontiers of Manufacturing Science and Measuring Technology (FMSMT 2017)*, Paris, France: Atlantis Press, 2017. doi: 10.2991/fmsmt-17.2017.167.
- [111] Y. Sun, Q. Yan, Y. Jiang, and X. F. Zhu, "Reliability prediction model of further bus service based on random forest," *J Algorithm Comput Technol*, vol. 11, no. 4, pp. 327–335, Dec. 2017, doi: 10.1177/1748301817725306.
- [112] W. Fang-Jie, W. Fu-Jian, W. Yu-Chen, and C. Bian, "bus travel time prediction based on light gradient boosting machine algorithm," *Journal of Transportation Systems Engineering and Information Technology*, vol. 19, no. 2, pp. 116–121, Apr. 2019.

- [113] Y. Zhong, Y. Shao, and W. Wu, "Short-term traffic flow prediction model based on XG boost," *Science Technology and Engineering*, vol. 19, no. 30, pp. 337–342, 2019.
- [114] Q. Han, K. Liu, L. Zeng, G. He, L. Ye, and F. Li, "A bus arrival time prediction method based on position calibration and LSTM," *IEEE Access*, vol. 8, pp. 42372–42383, 2020, doi: 10.1109/ACCESS.2020.2976574.
- [115] Y. Duan, Y. L.V., and F.-Y. Wang, "Travel time prediction with LSTM neural network," in *2016 IEEE 19th International Conference on Intelligent Transportation Systems (ITSC)*, IEEE, Nov. 2016, pp. 1053–1058. doi: 10.1109/ITSC.2016.7795686.
- [116] T. Yin, G. Zhong, J. Zhang, S. He, and B. Ran, "A prediction model of bus arrival time at stops with multi-routes," *Transportation Research Procedia*, vol. 25, pp. 4623–4636, 2017, doi: 10.1016/j.trpro.2017.05.381.
- [117] S. Ratneswaran and U. Thayasivam, "An improved bus travel time prediction using multi-model ensemble approach for heterogeneous traffic conditions," in *IEEE Conference on Intelligent Transportation Systems, Proceedings, ITSC*, Institute of Electrical and Electronics Engineers Inc., 2023, pp. 2410–2415. doi: 10.1109/ITSC57777.2023.10421794.
- [118] A. Munasinghe and D. Dhananjaya, "Bus travel time estimation using gps data: a case-based study for the kandy city," in *Proceedings of the National Engineering Research Symposium (NERS)*, 2020, pp. 95–102. [Online]. Available: <https://www.researchgate.net/publication/354061750>
- [119] S. Kumarage *et al.*, "Travel time estimation based on dynamic traffic data and machine learning principles," *IESE Annual Sessions*, pp. 1135–1142, 2017, [Online]. Available: <https://www.researchgate.net/publication/354143472>
- [120] S. Nadeeshan and A. S. Perera, "Multi-step bidirectional LSTM for low frequent bus travel time prediction," in *MERCon 2021 - 7th International Multidisciplinary Moratuwa Engineering Research Conference, Proceedings*, Institute of Electrical and Electronics Engineers Inc., Jul. 2021, pp. 462–467. doi: 10.1109/MERCon52712.2021.9525709.
- [121] S. Oh, Y.-J. Byon, K. Jang, and H. Yeo, "Short-term travel-time prediction on highway: a review of the data-driven approach," *Transp Rev*, vol. 35, no. 1, pp. 4–32, Jan. 2015, doi: 10.1080/01441647.2014.992496.
- [122] R. P. S. Padmanaban, K. Divakar, L. Vanajakshi, and S. C. Subramanian, "Development of a real-time bus arrival prediction system for Indian traffic

- conditions,” *IET Intelligent Transport Systems*, vol. 4, no. 3, p. 189, 2010, doi: 10.1049/iet-its.2009.0079.
- [123] Z. Huang, Q. Li, F. Li, and J. Xia, “A novel bus-dispatching model based on passenger flow and arrival time prediction,” *IEEE Access*, vol. 7, pp. 106453–106465, 2019, doi: 10.1109/ACCESS.2019.2932801.
- [124] AccuWeather, “Weather forecast for Moratuwa, Sri Lanka.” Accessed: Feb. 28, 2022. [Online]. Available: <https://www.accuweather.com/en/lk/moratuwa/311405/weather-forecast/311405?city=moratuwa>
- [125] D. Abbott, *Applied Predictive Analytics - Principles and Techniques for Professional Data Analytics*. John Wiley and Sons Inc, 2014.
- [126] F. Lazzeri, *Machine Learning for Time Series Forecasting with Python*. John Wiley & Sons Inc., 2021.
- [127] J. Brownlee, *Introduction to Time Series Forecasting with Python*, 1.9. 2020.