

REFERENCES

- [1] D. A. Putera, N. Fajri, and T. Alda, “Advancing electric vehicle safety and adoption in indonesia: Insights from global and local perspectives,” *Engineering Proceedings*, vol. 84, no. 1, p. 52, 2025.
- [2] X. Chen, K. Xing, F. Ni, Y. Wu, and Y. Xia, “An electric vehicle battery-swapping system: Concept, architectures, and implementations,” *IEEE Intelligent Transportation Systems Magazine*, vol. 14, no. 5, pp. 175–194, 2021.
- [3] W. Zhou, Y. Zheng, Z. Pan, and Q. Lu, “Review on the battery model and soc estimation method,” *Processes*, vol. 9, no. 9, p. 1685, 2021.
- [4] P. Sun, R. Bisschop, H. Niu, and X. J. F. t. Huang, “A review of battery fires in electric vehicles,” vol. 56, no. 4, pp. 1361–1410, 2020.
- [5] J. Qin, “Estimation of the state of charge (soc) and/or state of health (soh) in real driving cycles,” Ph.D. dissertation, Technische Hochschule Ingolstadt, 2023.
- [6] X. Hu, Y. Che, X. Lin, and Z. J. I. t. o. m. Deng, “Health prognosis for electric vehicle battery packs: A data-driven approach,” vol. 25, no. 6, pp. 2622–2632, 2020.
- [7] Z. Xu, J. Wang, P. D. Lund, and Y. J. E. Zhang, “Estimation and prediction of state of health of electric vehicle batteries using discrete incremental capacity analysis based on real driving data,” vol. 225, p. 120160, 2021.
- [8] P. Li, Z. Zhang, R. Grosu, Z. Deng, J. Hou, Y. Rong, R. J. R. Wu, and S. E. Reviews, “An end-to-end neural network framework for state-of-health estimation and remaining useful life prediction of electric vehicle lithium batteries,” vol. 156, p. 111843, 2022.
- [9] N. Noura, L. Boulon, and S. J. W. E. V. J. Jemeï, “A review of battery state of health estimation methods: Hybrid electric vehicle challenges,” vol. 11, no. 4, p. 66, 2020.
- [10] G. Dong, W. Han, and Y. J. I. T. o. I. E. Wang, “Dynamic bayesian network-based lithium-ion battery health prognosis for electric vehicles,” vol. 68, no. 11, pp. 10949–10958, 2020.

- [11] I. D. Mienye, Y. Sun, and Z. J. P. M. Wang, "Prediction performance of improved decision tree-based algorithms: a review," vol. 35, pp. 698–703, 2019.
- [12] H. Lu and X. J. C. Ma, "Hybrid decision tree-based machine learning models for short-term water quality prediction," vol. 249, p. 126169, 2020.
- [13] M. Sufyan, N. A. Rahim, M. A. Muhammad, C. K. Tan, S. R. S. Raihan, and A. H. A. J. E. P. S. R. Bakar, "Charge coordination and battery lifecycle analysis of electric vehicles with v2g implementation," vol. 184, p. 106307, 2020.
- [14] M. Messing, T. Shoa, and S. J. J. o. E. S. Habibi, "Estimating battery state of health using electrochemical impedance spectroscopy and the relaxation effect," vol. 43, p. 103210, 2021.
- [15] W. Vermeer, G. R. C. Mouli, and P. Bauer, "A comprehensive review on the characteristics and modeling of lithium-ion battery aging," *IEEE Transactions on Transportation Electrification*, vol. 8, no. 2, pp. 2205–2232, 2021.
- [16] H. Cheng, J. G. Shapter, Y. Li, and G. J. J. o. E. C. Gao, "Recent progress of advanced anode materials of lithium-ion batteries," vol. 57, pp. 451–468, 2021.
- [17] M. H. Lipu, M. Hannan, A. Hussain, A. Ayob, M. H. Saad, T. F. Karim, and D. N. J. J. o. C. p. How, "Data-driven state of charge estimation of lithium-ion batteries: Algorithms, implementation factors, limitations and future trends," vol. 277, p. 124110, 2020.
- [18] J. Lee and J. J. I. A. Won, "Enhanced coulomb counting method for soc and soh estimation based on coulombic efficiency," vol. 11, pp. 15 449–15 459, 2023.
- [19] S. Fu, T. LYU, F. MIN, W. LUO, C. LUO, L. WU, J. J. E. S. S. XIE, and Technology, "Review of estimation methods on soc of lithium-ion batteries in electric vehicles," vol. 10, no. 3, p. 1127, 2021.
- [20] L. Fang, J. Li, and B. J. E. P. Peng, "Online estimation and error analysis of both soc and soh of lithium-ion battery based on dekf method," vol. 158, pp. 3008–3013, 2019.
- [21] K. Das, R. Kumar, A. J. R. Krishna, and S. E. Reviews, "Analyzing electric vehicle battery health performance using supervised machine learning," vol. 189, p. 113967, 2024.

- [22] J. L. Speiser, M. E. Miller, J. Tooze, and E. J. E. s. w. a. Ip, "A comparison of random forest variable selection methods for classification prediction modeling," vol. 134, pp. 93–101, 2019.
- [23] J.-H. Lee and I.-S. J. E. Lee, "Lithium battery soh monitoring and an soc estimation algorithm based on the soh result," vol. 14, no. 15, p. 4506, 2021.
- [24] Y. Yao, Z. Chen, L. Wu, S. Cheng, and P. Lin, "Gradient boosting decision tree based state of health estimation for lithium-ion batteries," 2020.
- [25] A. M. Shaheen, M. A. Hamida, R. A. El-Sehiemy, and E. E. J. E. R. Elattar, "Optimal parameter identification of linear and non-linear models for li-ion battery cells," vol. 7, pp. 7170–7185, 2021.
- [26] A. Maheshwari, N. G. Paterakis, M. Santarelli, and M. J. A. E. Gibescu, "Optimizing the operation of energy storage using a non-linear lithium-ion battery degradation model," vol. 261, p. 114360, 2020.
- [27] P. Kurzweil, W. Scheuerpflug, B. Frenzel, C. Schell, and J. Schottenbauer, "Differential capacity as a tool for soc and soh estimation of lithium ion batteries using charge/discharge curves, cyclic voltammetry, impedance spectroscopy, and heat events: A tutorial," *Energies*, vol. 15, no. 13, p. 4520, 2022.
- [28] J. Wen, Q. Zou, C. Chen, and Y. Wei, "Linear correlation between state-of-health and incremental state-of-charge in li-ion batteries and its application to soh evaluation," *Electrochimica Acta*, vol. 434, p. 141300, 2022.
- [29] S. Saxena, L. Ward, J. Kubal, W. Lu, S. Babinec, and N. Paulson, "A convolutional neural network model for battery capacity fade curve prediction using early life data," *Journal of Power Sources*, vol. 542, p. 231736, 2022.
- [30] C. Azad, B. Bhushan, R. Sharma, A. Shankar, K. K. Singh, and A. J. M. S. Khamparia, "Prediction model using smote, genetic algorithm and decision tree (pmsgd) for classification of diabetes mellitus," pp. 1–19, 2022.
- [31] D. Chicco, M. J. Warrens, and G. Jurman, "The coefficient of determination r-squared is more informative than smape, mae, mape, mse and rmse in regression analysis evaluation," *Peerj computer science*, vol. 7, p. e623, 2021.
- [32] J. Gao, "R-squared (r²)—how much variation is explained?" *Research Methods in Medicine & Health Sciences*, vol. 5, no. 4, pp. 104–109, 2024.

- [33] R. S. S. Dittakavi, “Deep learning-based prediction of cpu and memory consumption for cost-efficient cloud resource allocation,” *Sage Science Review of Applied Machine Learning*, vol. 4, no. 1, pp. 45–58, 2021.
- [34] N. Samrgandi, “User interface design & evaluation of mobile applications,” *International Journal of Computer Science & Network Security*, vol. 21, no. 1, pp. 55–63, 2021.
- [35] A. Lecaros, A. Moquillaza, F. Falconi, J. Aguirre, A. Tapia, and F. Paz, “Selection and modeling of a formal heuristic evaluation process through comparative analysis,” in *International Conference on Human-Computer Interaction*. Springer, 2022, pp. 28–46.
- [36] J. R. Lewis and J. Sauro, “Usability and user experience: Design and evaluation,” *Handbook of human factors and ergonomics*, pp. 972–1015, 2021.
- [37] A. R. Lyon, J. Coifman, H. Cook, E. McRee, F. F. Liu, K. Ludwig, S. Dorsey, K. Koerner, S. A. Munson, and E. McCauley, “The cognitive walkthrough for implementation strategies (cwis): a pragmatic method for assessing implementation strategy usability,” *Implementation Science Communications*, vol. 2, pp. 1–16, 2021.
- [38] P. Jansen, J. Britten, A. Häusele, T. Segschneider, M. Colley, and E. Rukzio, “Autovis: Enabling mixed-immersive analysis of automotive user interface interaction studies,” in *Proceedings of the 2023 CHI Conference on Human Factors in Computing Systems*, 2023, pp. 1–23.
- [39] H. Habib and L. F. Cranor, “Evaluating the usability of privacy choice mechanisms,” in *Eighteenth Symposium on Usable Privacy and Security (SOUPS 2022)*, 2022, pp. 273–289.
- [40] Z. Wang, X. Zhao, L. Fu, D. Zhen, F. Gu, A. D. J. S. E. T. Ball, and Assessments, “A review on rapid state of health estimation of lithium-ion batteries in electric vehicles,” vol. 60, p. 103457, 2023.
- [41] M. Zhang, W. Chen, J. Yin, and T. J. E. Feng, “Health factor extraction of lithium-ion batteries based on discrete wavelet transform and soh prediction based on catboost,” vol. 15, no. 15, p. 5331, 2022.
- [42] S. Karthikeyan, R. A. Raj, M. V. Cruz, L. Chen, J. A. Vishal, and V. Rohith, “A systematic analysis on raspberry pi prototyping: Uses, challenges, benefits,

and drawbacks,” *IEEE Internet of Things Journal*, vol. 10, no. 16, pp. 14 397–14 417, 2023.

- [43] A. D. Sendek, B. Ransom, E. D. Cubuk, L. A. Pellouchoud, J. Nanda, and E. J. Reed, “Machine learning modeling for accelerated battery materials design in the small data regime,” *Advanced Energy Materials*, vol. 12, no. 31, p. 2200553, 2022.