

DAFTAR PUSTAKA

- Adamo, T., Ghiani, G., Guerriero, E., and Pareo, D., 2023, A Surprisal-Based Greedy Heuristic for the Set Covering Problem. *Algorithms 2023, Vol. 16, Page 321*, Vol.16, No.7, pp.321.
- Ahmed, G., Sheltami, T., Mahmoud, A., and Yasar, A., 2023, Energy-Efficient UAVs Coverage Path Planning Approach. *Computer Modeling in Engineering & Sciences*, Vol.136, No.3, pp.3239–3263.
- Alizadeh, R., and Nishi, T., 2020, Hybrid Set Covering and Dynamic Modular Covering Location Problem: Application to an Emergency Humanitarian Logistics Problem. *Applied Sciences 2020, Vol. 10, Page 7110*, Vol.10, No.20, pp.7110.
- Al-rabiaah, S., Hosny, M., and Almuhaideb, S., 2022, An Efficient Greedy Randomized Heuristic for the Maximum Coverage Facility Location Problem with Drones in Healthcare. *Applied Sciences 2022, Vol. 12, Page 1403*, Vol.12, No.3, pp.1403.
- Altin, I., and Sipahioglu, A., 2024, Drone Arc Routing Problems and Metaheuristic Solution Approach. *Drones 2024, Vol. 8, Page 373*, Vol.8, No.8, pp.373.
- Aprilianti, I., and Amanta, F., 2020, Promoting Food Safety in Indonesia's Online Food Delivery Services. *CIPS: Center for Indonesian Policy Studies*.
- Arafat, M. Y., and Moh, S., 2022, JRCS: Joint Routing and Charging Strategy for Logistics Drones. *IEEE Internet of Things Journal*, Vol.9, No.21, pp.21751–21764.
- Baldisseri, A., Siragusa, C., Seghezzi, A., Mangiaracina, R., and Tumino, A., 2022, Truck-based drone delivery system: An economic and environmental assessment. *Transportation Research Part D: Transport and Environment*, Vol.107, pp.103296.
- Baldomero-Naranjo, M., Martínez-Merino, L. I., and Rodríguez-Chía, A. M., 2024, Multi-product maximal covering second-level facility location problem. *Computers and Industrial Engineering*, Vol.189, .
- Ballare, S., and Lin, J., 2020, Investigating the use of microhubs and crowdshipping for last mile delivery. *Transportation Research Procedia*, Vol.46, pp.277–284.
- Bayram, I. S., Zafar, U., and Bayhan, S., 2022, Could Petrol Stations Play a Key Role in Transportation Electrification? A GIS-Based Coverage Maximization

of Fast EV Chargers in Urban Environment. *IEEE Access*, Vol.10, pp.17318–17329.

Blanco, V., and Gázquez, R., 2021, Continuous maximal covering location problems with interconnected facilities. *Computers and Operations Research*, Vol.132, .

Boeing, G., 2017, OSMnx: New methods for acquiring, constructing, analyzing, and visualizing complex street networks. *Computers, Environment and Urban Systems*, Vol.65, pp.126–139.

Boukoberine, M. N., Zhou, Z., and Benbouzid, M., 2019, A critical review on unmanned aerial vehicles power supply and energy management: Solutions, strategies, and prospects. *Applied Energy*, Vol.255, pp.113823.

Buhat, C. A. H., Villamin, J. K. L., and Cuaresma, G. A., 2022, Application of ant colony optimization metaheuristic on set covering problems. *Mathematics in Applied Sciences and Engineering*, Vol.3, No.1, pp.12–23.

Chauhan, D. R., Unnikrishnan, A., Figliozzi, M. A., and Boyles, S. D., 2023, Robust Multi-Period Maximum Coverage Drone Facility Location Problem Considering Coverage Reliability. *Transportation Research Record* (Vol. 2677, pp. 98–114). SAGE Publications Ltd.

Chauhan, D., Unnikrishnan, A., and Figliozzi, M., 2019, Maximum coverage capacitated facility location problem with range constrained drones. *Transportation Research Part C: Emerging Technologies*, Vol.99, pp.1–18.

Chung, C. H., 1986, Recent applications of the maximal covering location planning (Mclp) model. *Journal of the Operational Research Society*, Vol.37, No.8, pp.735–746.

De Silva, S. C., Phlernjai, M., Rianmora, S., and Ratsamee, P., 2022, Inverted Docking Station: A Conceptual Design for a Battery-Swapping Platform for Quadrotor UAVs. *Drones 2022, Vol. 6, Page 56*, Vol.6, No.3, pp.56.

Dincer, I., and Abu-Rayash, A., 2020, Sustainability modeling. *Energy Sustainability*, pp.119–164.

Dorigo, M., Birattari, M., Stützle, T., and Stützle, S., 2006, Ant Colony Optimization Artificial Ants as a Computational Intelligence Technique.

Dukkanci, O., Campbell, J. F., and Kara, B. Y., 2024, Facility location decisions for drone delivery: A literature review. *European Journal of Operational Research*, Vol.316, No.2, pp.397–418.

Durand, A., Watteau, T., Ghazi, G., and Botez, R. M., 2024, Generalized Shortest Path Problem: An Innovative Approach for Non-Additive Problems in

Conditional Weighted Graphs. *Mathematics 2024*, Vol. 12, Page 2995, Vol.12, No.19, pp.2995.

ElSayed, M., Foda, A., and Mohamed, M., 2022, Autonomous drone charging station planning through solar energy harnessing for zero-emission operations. *Sustainable Cities and Society*, Vol.86, pp.104122.

Fatima, S., and Maurya, K. C., 2023, A Review Article on Upgrading Shortest Path Problems. *International Journal of Engineering and Management Research*, Vol.13, No.3, pp.221–226.

Fazel Zarandi, M. H., Davari, S., and Haddad Sisakht, S. A., 2011, The large scale maximal covering location problem. *Scientia Iranica*, Vol.18, No.6, pp.1564–1570.

Garside, A. K., 2017, LOGISTIK KOTA : SEBUAH TINJAUAN LITERATUR. *Prosiding SENTRA (Seminar Teknologi dan Rekayasa)*. Retrieved April 3, 2022, from <http://research-report.umm.ac.id/index.php/sentra/article/view/1461/1689>

He, R., Xu, Y., and Jiang, S., 2022, Applications of GIS in Public Security Agencies in China. *Asian Journal of Criminology*.

Hong, I., Kuby, M., and Murray, A. T., 2018, A range-restricted recharging station coverage model for drone delivery service planning. *Transportation Research Part C: Emerging Technologies*, Vol.90, pp.198–212.

Huang, H., and Savkin, A. V., 2020, A Method of Optimized Deployment of Charging Stations for Drone Delivery. *IEEE Transactions on Transportation Electrification*, Vol.6, No.2, pp.510–518.

Jiang, H., and Ren, X., 2020, Comparative Analysis of Drones and Riders in On-Demand Meal Delivery Based on Prospect Theory. *Discrete Dynamics in Nature and Society*.

Khorjuvenkar, P. R., and Singh, A., 2019, A Hybrid Swarm Intelligence Approach for Anti-Covering Location Problem. *2019 Innovations in Power and Advanced Computing Technologies, i-PACT 2019*.

Kim, S. J., Lim, G. J., Cho, J., and Côté, M. J., 2017, Drone-Aided Healthcare Services for Patients with Chronic Diseases in Rural Areas. *Journal of Intelligent and Robotic Systems: Theory and Applications*, Vol.88, No.1, pp.163–180.

Kirschstein, T., 2021, Energy demand of parcel delivery services with a mixed fleet of electric vehicles. *Cleaner Engineering and Technology*, Vol.5, pp.100322.

- Kitjacharoenchai, P., and Lee, S., 2019, Vehicle Routing Problem with Drones for Last Mile Delivery. *Procedia Manufacturing*, Vol.39, pp.314–324.
- Ko, Y. K. ;, Han, H. ;, Oh, Y. ;, Ko, Y. D., Royall, P., Oakey, A., Ko, Y. K., Han, H., Oh, Y., and Ko, Y. D., 2024, The Development of an Optimal Operation Algorithm for Food Delivery Using Drones Considering Time Interval between Deliveries. *Drones 2024, Vol. 8, Page 230*, Vol.8, No.6, pp.230.
- Lan, S., Yang, C., and Huang, G. Q., 2017, Data analysis for metropolitan economic and logistics development. *Advanced Engineering Informatics*, Vol.32, pp.66–76.
- Li, H., and Wang, Y., 2023, Hierarchical Multimodal Hub Location Problem with Carbon Emissions. *Sustainability 2023, Vol. 15, Page 1945*, Vol.15, No.3, pp.1945.
- Liu, Y., 2019, An optimization-driven dynamic vehicle routing algorithm for on-demand meal delivery using drones. *Computers and Operations Research*, Vol.111, pp.1–20.
- Liu, Z., Liu, X., Yang, L., Leo, D., and Zhao, H., 2018, an Autonomous Dock and Battery Swapping System for Multirotor UAV. *Unpublished*.
- Lu, F., Jiang, R., Bi, H., and Gao, Z., 2024, Order Distribution and Routing Optimization for Takeout Delivery under Drone–Rider Joint Delivery Mode. *Journal of Theoretical and Applied Electronic Commerce Research 2024, Vol. 19, Pages 774-796*, Vol.19, No.2, pp.774–796.
- Maliki, F., Souier, M., Dahane, M., and Ben Abdelaziz, F., 2022, A multi-objective optimization model for a multi-period mobile facility location problem with environmental and disruption considerations. *Annals of Operations Research*, pp.1–26.
- Mangiaracina, R., Perego, A., Seghezzi, A., and Tumino, A., 2019, Innovative solutions to increase last-mile delivery efficiency in B2C e-commerce: a literature review. *International Journal of Physical Distribution and Logistics Management*, Vol.49, No.9, pp.901–920.
- Martínez-Sykora, A., McLeod, F., Cherrett, T., and Friday, A., 2024, Exploring fairness in food delivery routing and scheduling problems. *Expert Systems with Applications*, Vol.240, pp.122488.
- Mcnair, I., 2021, *Simulation Study of The Integration of Hydrogen Fuel Cells into Unmanned Aerial Vehicles (UAV) and Estimation of The Emission Savings Achieved when Compared to a UAV with a Gasoline Combustion Engine*. Universitat Politècnica de Valencia.

- Medrano-Gómez, X. D., Ferreira, D., Toso, E. A. V., and Ibarra-Rojas, O. J., 2020, Using the maximal covering location problem to design a sustainable recycling network. *Journal of Cleaner Production*, Vol.275, .
- Mohamad, R. R. A., and Shopa, B. M., 2023, *Perencanaan Lokasi Electric Vehicle Charging Station Menggunakan Data Sistem Informasi Geografis (SIG) untuk Memaksimalkan Cakupan Potential Demand*. Universitas Gadjah Mada, Yogyakarta. Retrieved from <https://etd.repository.ugm.ac.id/penelitian/detail/230903>
- Nugroho, R., Hanafi, J., Shobatake, K., Chun, Y. Y., Tahara, K., and Purwanto, W. W., 2022, Life cycle inventories and life cycle assessment for an electricity grid network: case study of the Jamali grid, Indonesia. *International Journal of Life Cycle Assessment*, Vol.27, No.8, pp.1081–1091.
- Olgac, T., and Toz, A. C., 2022, Determining the Optimum Location of Ground Control Stations (GCSs) for Unmanned Aerial Vehicles (UAVs) in Marine Search and Rescue (MSAR) Operations. *International Journal of Aeronautical and Space Sciences*, Vol.23, No.5, pp.1021–1032.
- Park, Y., Nielsen, P., and Moon, I., 2020, Unmanned aerial vehicle set covering problem considering fixed-radius coverage constraint. *Computers & Operations Research*, Vol.119, pp.104936.
- Pinto, R., and Lagorio, A., 2022, Point-to-point drone-based delivery network design with intermediate charging stations. *Transportation Research Part C: Emerging Technologies*, Vol.135, pp.103506.
- Pinto, R., Zambetti, M., Lagorio, A., and Pirola, F., 2019, A network design model for a meal delivery service using drones. *International Journal of Logistics Research and Applications*, Vol.23, No.4, pp.354–374.
- Puram, P., Gurumurthy, A., Narmetta, M., and Mor, R. S., 2021, Last-mile challenges in on-demand food delivery during COVID-19: understanding the riders' perspective using a grounded theory approach. *International Journal of Logistics Management*.
- Puspita, F., Dewi, N., Yuliza, E., Octarina, S., and Anisawati, Y., 2024, Set Covering Problem with the Reduction Heuristic Method in Determining the Temporary Disposal Site Locations in Pulau Semambu Village in South Sumatra. *Proceedings of the 3rd Sriwijaya International Conference on Basic and Applied Sciences*. European Alliance for Innovation n.o.
- Rajabi, M. S., Beigi, P., and Aghakhani, S., 2023, Drone Delivery Systems and Energy Management: A Review and Future Trends. *Handbook of Smart Energy Systems*, pp.1273–1291.

- Ren, X., Froger, A., Jabali, O., and Liang, G., 2024, A competitive heuristic algorithm for vehicle routing problems with drones. *European Journal of Operational Research*, Vol.318, No.2, pp.469–485.
- Restianti, Y. Y., and Gheewala, S. H., 2012, Life cycle assessment of gasoline in Indonesia. *International Journal of Life Cycle Assessment*, Vol.17, No.4, pp.402–408.
- Saldanha-da-Gama, F., 2022, Facility Location in Logistics and Transportation: An enduring relationship. *Transportation Research Part E: Logistics and Transportation Review*, Vol.166, pp.102903.
- Sallnäs, U., and Björklund, M., 2023, Green e-commerce distribution alternatives – a mission impossible for retailers? *International Journal of Logistics Management*, Vol.34, No.7, pp.50–74.
- Santos, L., Coutinho-Rodrigues, J., and Current, J. R., 2007, An improved solution algorithm for the constrained shortest path problem. *Transportation Research Part B: Methodological*, Vol.41, No.7, pp.756–771.
- Seghezzi, A., Winkenbach, M., and Mangiaracina, R., 2021, On-demand food delivery: a systematic literature review. *International Journal of Logistics Management*, Vol.32, No.4, pp.1334–1355.
- Sopha, B. M., Setiowati, S., and Ma'mun, S., 2017, Environmental Assessment of Motorcycle using a Life-Cycle Perspective. *Indonesian Journal of Life Cycle Assessment and Sustainability*, Vol.1, No.1,.
- Stolaroff, J. K., Samaras, C., O'Neill, E. R., Lubers, A., Mitchell, A. S., and Ceperley, D., 2018, Energy use and life cycle greenhouse gas emissions of drones for commercial package delivery. *Nature Communications 2018 9:1*, Vol.9, No.1, pp.1–13.
- Suguna, M., Shah, B., Raj, · S Karthik, and Suresh, · M, 2021, A study on the influential factors of the last mile delivery projects during Covid-19 era. *Operations Management Research*.
- Sunarso, R. V. P., and Wibowo, B. S., 2023, The Impact of Consolidating On-Demand Food Delivery on Sustainability: A Simulation Study. *LOGI - Scientific Journal on Transport and Logistics*, Vol.14, No.1, pp.286–297.
- Taniguchi, E., Thompson, R. G., and Yamada, T., 2016, New Opportunities and Challenges for City Logistics. *Transportation Research Procedia*, Vol.12, pp.5–13.
- Taniguchi, E., Thompson, R. G., Yamada, T., and van Duin, R., 2001, City Logistics with ITS. *City Logistics*, pp.49–65.

- Technavio, 2024, AI is Redefining the Online On-Demand Food Delivery Market, Set to Grow by USD 559.2 Billion (2024-2028) Due to Restaurant-Aggregator Partnerships - Technavio Report. *Technavio*. Retrieved January 3, 2025, from <https://www.prnewswire.com/news-releases/ai-is-redefining-the-online-on-demand-food-delivery-market-set-to-grow-by-usd-559-2-billion-2024-2028-due-to-restaurant-aggregator-partnerships--technavio-report-302252084.html>
- Troudi, A., Addouche, S. A., Dellagi, S., and El Mhamedi, A., 2018, Sizing of the Drone Delivery Fleet Considering Energy Autonomy. *Sustainability 2018*, Vol. 10, Page 3344, Vol.10, No.9, pp.3344.
- Ulukan, Z., and Demircioğlu, E., 2015, A Survey of Discrete Facility Location Problems. *Zenodo*.
- Upadhyay, C. K., Vasantha, G. A., Tiwari, V., Tiwari, V., and Pandiya, B., 2020, Strategic upturn of reverse logistics with Crowdshipping: Transportation explication for India. *Transportation Research Procedia*, Vol.48, pp.247–259.
- Vadwala, M. Y., 2017, E-Commerce: Merits and Demerits A Review Paper SAMVAD-Speak Ask Manage Via Android Device View project. *International Journal of Trend in Scientific Research and Development*, Vol.1, No.4, pp.117–120.
- Vichitkunakorn, P., Emde, S., Masae, M., Glock, C. H., and Grosse, E. H., 2024, Locating charging stations and routing drones for efficient automated stocktaking. *European Journal of Operational Research*, Vol.316, No.3, pp.1129–1145.
- Voccia, S. A., Campbell, A. M., and Thomas, B. W., 2019, The same-day delivery problem for online purchases. *Transportation Science*, Vol.53, No.1, pp.167–184.
- Wang, S., Xiao, X., Yang, Y., and Lin, W., 2016, Effective indexing for approximate constrained shortest path queries on large road networks. *Proceedings of the VLDB Endowment*, Vol.10, No.2, pp.61–72.
- Wang, Z., and He, S. Y., 2021, Impacts of food accessibility and built environment on on-demand food delivery usage. *Transportation Research Part D: Transport and Environment*, Vol.100, pp.103017.
- Wankhede, N. D., Choudhari, A. G., Pokale, S. K., Duratkar, S. S., and Sheikh, Z. I., 2025, Food Delivery Drones: Revolutionizing The Last Mile Delivery System. *International Journal of Creative Research Thoughts (IJCRT)*, Vol.13, pp.1–5.
- Weichselbaum, J., Petrini-Monteferri, F., Papatoma, M., Wagner, W., and Hackner, N., 2005, Sharpening Census Information In GIS To Meet Real-

world Conditions: The Case For Earth Observation. *WIT Transactions on Ecology and the Environment*, Vol.84, pp.565.

Wiese, A., Zielke, S., and Toporowski, W., 2015, Sustainability in Retailing - research streams and emerging trends. *International Journal of Retail & Distribution Management*, Vol.43, No.5, pp.2015.

Wirawan, N. J., 2021, *Perencanaan Lokasi Consolidated Microhub Menggunakan Data Sistem Informasi Geografis (SIG) untuk Meningkatkan Aksesibilitas Logistik Kota di Yogyakarta*. Universitas Gadjah Mada, Yogyakarta.

Xia, Y., Zeng, W., Xing, X., Zhan, Y., Tan, K. H., and Kumar, A., 2021, Joint optimisation of drone routing and battery wear for sustainable supply chain development: a mixed-integer programming model based on blockchain-enabled fleet sharing. *Annals of Operations Research*, Vol.327, No.1, pp.89–127.

Xiao, Q., and Gao, J., 2024, The Multi-Visit Vehicle Routing Problem with Drones under Carbon Trading Mechanism. *Sustainability 2024*, Vol. 16, Page 6145, Vol.16, No.14, pp.6145.

Xue, G., Wang, Z., and Wang, G., 2021, Optimization of Rider Scheduling for a Food Delivery Service in O2O Business. *Journal of Advanced Transportation*, Vol.2021, .

Zaid, M. A., 2015, Correlation and Regression Analysis. Retrieved from www.sesric.org

Zhang, J., Campbell, J. F., Sweeney, D. C., and Hupman, A. C., 2021, Energy consumption models for delivery drones: A comparison and assessment. *Transportation Research Part D: Transport and Environment*, Vol.90, .

Zhao, R., Xiao, Y., Luo, R., Yang, R., Zhou, S., and Zhang, S., 2023, Discrete-continuous model for facility location problem with capacity-cost relation constraints. *Computers & Industrial Engineering*, Vol.185, pp.109661.

Zhou, L., Ye, A., and Hu, S., 2022, A Four-stage Heuristic Algorithm for Solving On-demand Meal Delivery Routing Problem. Retrieved from <https://arxiv.org/abs/2212.03505v3>

Zwierzykowski, P., and Głabowski, M. G., 2014, Review and Performance Analysis of Shortest Path Problem Solving Algorithms. *The International Journal on Advances in Software*, ISSN: 1942-2628, vol. 7, no. 1& 2, year 2014, .