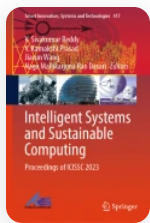


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# Computational Intelligence to Progress in WMN

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## [Intelligent Systems and Sustainable Computing](#) (ICISSC 2024)

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## Abstract

Wireless mesh networks are been prominently developing in the past two decades and have received a lot of accomplished tasks in various applications. Machine learning is an art of computational intelligence that enhances development day by day in a rapid manner. The

planned work deals with the combination of machine learning techniques to increase the Eminence of Amenities in wireless mesh networks. The prominent ideas of machine learning are to enhance the performance in Wireless Mesh Networks.

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## References

1. Samuylov, A. et al.: GAR: gradient assisted routing for topology self-organization in dynamic mesh networks. *Comput. Commun.* **190**, 10–23 (2022)

[Google Scholar](#)

2. Ali, S., Pandey, M., Tyagi, N.: SDFog-Mesh: a software-defined fog computing architecture over wireless mesh networks for semi-permanent smart environments. *Comput. Netw.* **211**, 108985 (2022)

[Article](#) [Google Scholar](#)

3. Duong, T.-V., Ngo, V.M.: Reinforcement learning for QoS-guaranteed intelligent routing in Wireless Mesh Networks with heavy traffic load. *ICT Express* 8(1), 18–24 (2022)

[Article](#) [Google Scholar](#)

4. Mahajan, S., Harikrishnan, R., Kotecha, K.: Adaptive routing in wireless mesh networks using hybrid reinforcement learning algorithm. *IEEE Access* **10**, 107961–107979 (2022)

[Google Scholar](#)

5. Taleb, S.M., et al.: Nodes placement in wireless mesh networks using optimization approaches: a survey. *Neural Comput. Appl.* **34**(7), 5283–5319 (2022)

[Google Scholar](#)

6. Glover, F.: Tabu search—uncharted domains. *Ann. Oper. Res.* **149**(1), 89–98 (2007)

[Article](#) [MathSciNet](#) [Google Scholar](#)

7. Akyildiz, I.F., Wang, X., Wang, W.: Wireless mesh networks: a survey. *Elsevier Comput. Netw. J.* **47**(4), 445–487 (2005)

[Article](#) [Google Scholar](#)

8. Nguyen, U.T.: On multicast routing in wireless mesh networks. *J. Comput. Commun.* **31**, 1385–1399 (2008)

[Article](#) [Google Scholar](#)

9. Glover, F., Laguna, M.: Tabu Search. Kluwer Academic Publishers (1997)

[Book](#) [Google Scholar](#)

10. Revathy, G.: Mounting eminence of services in wireless mesh networks. *Int. J. Res. Anal. Rev.* (2018)

[Google Scholar](#)

11. Revathy, G., Selvakumar, K.: Sustain route by tabu and amplified QoS by distributed scheduling in WMN. *Int. J. Recent. Trends Eng. Res.*

[Google Scholar](#)

12. Revathy, G., Selvakumar, K.: Channel assignment using tabu search in wireless mesh networks. *Wirel. Pers. Commun.*

[Google Scholar](#)

13. Revathy, G., Selvakumar, K.: Increasing quality of services in wireless mesh networks. *Int. J. Adv. Res. Comput. Eng. Technol.* 7(3) (2018)

[Google Scholar](#)

14. Revathy, G., Selvakumar, K.: Escalating quality of services with channel assignment and traffic scheduling in wireless mesh networks. *Clust. Comput.* (2018). ISSN 13867857

[Google Scholar](#)

15. Revathy, G., Selvakumar, K.: Route maintenance using tabu search and priority scheduling in wireless mesh networks. *J. Adv. Res. Dyn. Control. Syst.* 9(6) (2017)

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