

Review of: "A Smart Vehicle Charging Station Identification Based On IOT with Hybrid Grey Wolf-Bat Optimization Enriched On Artificial Neural Networks Recognition Methods"

Arkadiusz Małek

Potential competing interests: No potential competing interests to declare.

The article presents a very popular topic regarding charging electric cars. Both electric cars and chargers are now devices of the Internet of Things. Thus, communication between them can be used to effectively plan the route of an electric vehicle.

- 1) In the introduction, the author should expand on the subject of electric vehicles as devices of the Internet of Things. Additional 3-5 articles describing the methods of data transmission from vehicles (LTE, 5G, Bluetooth) should be cited.
- 2) In the introduction, the author should expand on the different types of chargers for electric vehicles. It should describe their power and charging sockets (Type 2, CCS, Chademo). Cite 3-5 recent articles in this area.
- 3) In the introduction, the author should expand on the topic of charging vehicles with electricity from Renewable Energy Sources. Only one article in this area [4] written in 2019 was cited. A lot has happened since then. Cite 3-5 recent articles.
- 4) In the introduction, it should be mentioned that there are already online platforms for planning routes of electric vehicles with a database of chargers. An example is the platform <https://www.plugshare.com/>. However, not all chargers have a free/busy status.

Intelligent algorithms have been described correctly.

The research experiment and the work plan were properly planned and executed. The results of the proposed algorithm were compared to known and often used in science algorithms and methods of data analysis.

- 5) Figure 2 - no description of the y axis
- 6) Figure 3 - no description of the y axis
- 7) Figure 6 - no description of the y axis
- 8) Figure 6 - the legend enters the description of the x axis. This needs to be corrected.
- 9) V. Results and Discussion - too short description and not enough discussion. Each figure and each table should be thoroughly described and discussed. Have 5-7 sentences of description for each item.
- 10) The conclusions lack a description of the practical use of the research results presented in the article. The conclusions lack a description of the research planned for the future.

The article is suitable for publication if the changes described above are made.

Best regards

