CORRECTION

Correction: Deep Learning Implemented Visualizing City Cleanliness Level by Garbage Detection

M. S. Vivekanandan[1] and T. Jesudas[2,*]

[1]Anna University, Chennai, 600025, Tamil Nadu, India

[2]Mahendra Engineering College (Autonomous), Namakkal, 637503, Tamil Nadu, India

*Corresponding Author: T. Jesudas. Email: jesuphd@gmail.com

In the article "Deep Learning Implemented Visualizing City Cleanliness Level by Garbage Detection" by M. S. Vivekanandan and T. Jesudas, (*Intelligent Automation & Soft Computing*, 2023, Vol. 36, No. 2, pp. 1639–1652. doi: 10.32604/iasc.2023.032301), the References [5], [6], [7], [8], [11], [15], [17], [20], [25], [26], [27] were wrongly cited.

The authors sincerely apologize for any inconvenience caused by the inappropriate inclusion of References [5], [6], [7], [8], [11], [15], [17], [20], [25], [26], [27] and related content in the original text. The authors have corrected this mistake by removing References [5], [6], [7], [8], [11], [15], [17], [20], [25], [26], [27] and any related content referencing it in the main text.

Please find below the corrected information:

1. Deleted References [5], [6], [7], [8]:

[5] P. Parthasarathy and S. Vivekanandan, "Internet of things (IoT) in healthcare–smart health and surveillance, architectures, security analysis and data transfer: A review," *International Journal of Software Innovation (IJSI)*, vol. 7, no. 2, pp. 21–40, 2020.

[6] P. Parthasarathy and S. Vivekanandan, "Urate crystal deposition, prevention and various diagnosis techniques of gout arthritis disease: A comprehensive review," *Health Information Science and Systems*, vol. 6, no. 1, pp. 19, 2018.

[7] P. Parthasarathy and S. Vivekanandan, "Investigation on uric acid biosensor model for enzyme layer thickness for the application of arthritis disease diagnosis," *Health Information Science and Systems*, vol. 6, no. 1, pp. 5, 2018.

[8] R. Varadharajan, M. K. Priyan, P. Panchatcharam, S. Vivekanandan and M. Gunasekaran, "A new approach for prediction of lung carcinoma using back-propagation neural network with decision tree classifiers," *Journal of Ambient Intelligence and Humanized Computing*, pp. 1–12, 2018. doi: 10.1007/s12652-018-1066-y.

Deleted content referencing References [5], [6], [7], [8] in the main text:

The proposed research using the dynamic process of feature extraction and accuracy level segmentation of time-optimal criteria for garbage detection of all waste from the ground level process [4].

2. Deleted Reference [11]:

[11] P. Parthasarathy and S. Vivekanandan, "An extensive study on the covid-19 pandemic, an emerging global crisis: Risks, transmission, impacts, and mitigation," *Journal of Infection and Public Health*, vol. 14, no. 2, pp. 249–259, 2021.

Deleted content referencing Reference [11] in the main text:

Parthasarathy et al. [11] this research aims to study a robotic control system for surface cleaning and focused on controller design. A speed control principle of Pulse Width Modulation (PWM) design is based on a robotic surface on the force control system. The function of each module is divided and described in detail. Presented a proposal hardware design and software design is based on Atmel microprocessor kind of process. Through Personal Computer (PC) and RS485 communication according to the protocol of control system that achieves work operations robotic backward and forwards by the use of stepper motor and Direct Current (DC) motor therefore successfully realize the work of robotic surface cleaning. Smart City's initiative is a part of the activities to manage the city of San Jose by developing a holistic and efficient system. As part of ongoing work, the author(s) will be designed and developed a prototype to verify and validated an approach.

3. Deleted References [15], [17]:

[15] P. Parthasarathy and S. Vivekanandan, "Numerical modeling of an amperometric-enzymatic based uric acid biosensor for gout arthritis diseases," *Informatics in Medicine Unlocked*, vol. 12, pp. 143–147, 2018.
[17] K. Mathan, P. M. Kumar, P. Panchatcharam, G. Manogaran and R. Varadharajan, "A novel gini index decision tree data mining method with neural network classifiers for prediction of heart disease," *Design Automation for Embedded Systems*, vol. 22, pp. 225–248, 2018.

Deleted content referencing References [15], [17] in the main text:

Thus, the proposed system of a robot can serve as better assistance to release dustman's physical labour work on the task of garbage cleaning [9], [10].

4. Deleted Reference [20]:

[20] P. Parthasarathy and S. Vivekanandan, "A comprehensive review on thin film-based nano-biosensor for uric acid determination: Arthritis diagnosis," *World Review of Science, Technology and Sustainable Development*, vol. 14, no. 1, pp. 52–71, 2018.

Deleted content referencing Reference [20] in the main text:

The dashboard of the data analysis is processed information from the raw data store to plot the status of the real-time cleanliness [11], [12].

5. Deleted References [25], [26], [27]:

[25] W. Sun, X. Chen, X. R. Zhang, G. Z. Dai, P. S. Chang *et al.,* "A multi-feature learning model with enhanced local attention for vehicle re-identification," *Computers, Materials & Continua*, vol. 69, no. 3, pp. 3549–3560, 2021.
[26] S. Debnath, K. Ramalakshmi, and M. Senbagavalli, "Multimodal authentication system based on audio-visual data: A review," in *Proc. 2022 Int. Conf. for Advancement in Technology (ICONAT)*, Goa, IEEE, 2022, 21660941, pp. 1–5, 2022.
[27] W. Sun, G. C. Zhang, X. R. Zhang, X. Zhang and N. N. Ge, "Fine-grained vehicle type classification using lightweight convolutional neural network with feature optimization and joint learning strategy," *Multimedia Tools and Applications*, vol. 80, no. 20, pp. 30803–30816, 2021.

Deleted content referencing References [25], [26], [27] in the main text:

Edge computing is applied in the segmentation of ground-level assessment for indicating points of the centralized method [13–16].