

INTERNATIONAL JOURNAL OF PERFORMABILITY ENGINEERING

Online ISSN: 2993-8341

Print ISSN: 0973-1318

COPYRIGHT TRANSFER FORM

I hereby assign the International Journal of Performability Engineering (the "IJPE") with full title guarantee all rights of copyright and related publishing rights in my article, in all forms and all media (whether known at this time or developed at any time in the future) throughout the world, in all languages, where our rights include but are not limited to the right to translate, create adaptations, extracts, or derivative works and to sub-license such rights, for the full term of copyright (including all renewals and extensions of that term). I confirm that I have read and accepted the full terms with my author warranties, and have read and agreed to comply with the journal's policies.

Article entitled: Along with convenience, the number of automobiles on our roadways is constantly increasing, which raises the worry of air pollution. The environment and human health are seriously threatened by the toxic gas mixture that is vehicle emissions. Innovative approaches are being developed to address this problem, and one such technique that shows promise is the Internet of Things. This article uses a strong combination of sensors, a robust development kit, and a splash of creativity to explore the fascinating field of Internet of Things-powered automobile pollution monitoring and control.

The Sensor Group: Toxic gases from smoke, including carbon dioxide, carbon monoxide, and hydrocarbon gases, can be detected using the MQ2, MQ7, and MQ135 gas sensors.

The ESP32 : Heart of the operation Without a proficient interpreter, these sensors wouldn't be much use. The ESP32 is a development kit that has Wi-Fi capabilities. It serves as the main processing unit, gathering, evaluating, and potentially initiating remedial action based on the data it receives from the sensors.

The Game changer: Consider the following scenario: rather than a vehicle being continuously serviced for several months, which could result in air pollution, sensors are detecting unusual increases in gasses, which could shorten the vehicle's lifespan. On the proof of vehicle pollution control, a PUC document issued by the RTO is a static value reader that can cause emissions for a limited period of time, but once the prototype is used, it can read the run time value and display the reading of each of several toxic gases in digital form.

Exciting opportunities abound on the path ahead. Through the utilisation of the Internet of Things and the commitment of engineers and environmentalists, we have the potential to muffle the din of our cars and create a more sustainable and healthful future for future generations.

Authors: Bhushan Chaudhari, Harshit Arun Gujarathi, Manish Shankarlal Makhija, Ramandeepkaur Banvat and lokesh Dipak Patil

COPYRIGHT TRANSFER

The undersigned hereby assigns to the International Journal of Performability Engineering (the "IJPE") all rights under copyright that may exist in and to: (a) the work, including any revised or expanded derivative works submitted to the IJPE by the undersigned based on the work; and (b) any associated written or multimedia components or other enhancements accompanying the work.

GENERAL TERMS

1. The undersigned represents that he/she has the power and authority to make and execute this form.
2. The undersigned agrees to indemnify and hold harmless the IJPE from any damage or expense that may arise in the event of a breach of any of the warranties set forth above.
3. The undersigned agrees that publication with the IJPE is subject to the policies and procedures of the IJPE.
4. In the event the above work is withdrawn by the author(s) before publication by the IJPE or is not accepted for publication by the IJPE, the foregoing copyright transfer shall be null and void. In this case, the IJPE will retain a copy of the manuscript for internal administrative/record-keeping purposes.
5. For jointly authored Works, all joint authors should sign, or one of the authors should sign as an authorized agent for the others.
6. The author hereby warrants that the Work and Presentation (collectively, the "Materials") are original and that he/she is the author of the Materials. To the extent the Materials incorporate text passages, figures, data, or other material from the works of others, the author has obtained any necessary permissions. Where necessary, the author has obtained all third-party permissions and consents to grant the license above and has provided copies of such permissions and consents to the IJPE.

AUTHOR PERSONAL USE

Authors reserve rights of personal use of the work, such as:

- a) Trademark and patent rights pertaining to the work.
- b) The right to reproduce all or part of the Work for educational use by the authors.

- c) The right to use all or part of the Work in a future book by the Authors or for inclusion of the work in a collection for publication.
- d) The right to use the work for internal distribution at the authors' place of employment.
- e) The right to publicly recite all or part of the Work and the information it contains.

By opting to publish your paper in IJPE, you are required to follow the publication ethics upheld by the scientific community. This entails refraining from submitting or publishing a similar paper to any other publication venue.

Author's name/Authors' names in print:

Date: 02-2024)

Bhushan Chaudhari, Harshit Arun Gujarathi, Manish Shankarlal
Makhija, Ramandeepkaur Banvat and lokesh Dipak Patil

Signature(s):





