

Submission Summary

Conference Name

International Conference on NextGen Data Science and Analytics

Paper ID

346

Paper Title

YogaSensei –Machine learning-based platform for tailored yoga sessions

Abstract

Numerous new yoga students have the danger of getting injured and having a low compliance rate due to inappropriate routines and the inability to receive real-time posture advice on static online platforms. This paper presents an online smart aid, YogaSensei, which can provide safe yoga to people in a personalized manner. The platform combines three important technical features to surmount the delivery of the current solutions: a Random Forest recommendation model that creates session plans that are goal-oriented and daily to deliver; a Rule-Based Filtering layer, which serves as a hard safety constraint, excluding poses inappropriate to the health data of the user; and a Real-Time Computer Vision module (with the use of MediaPipe), which identifies crucial joint angles and offers immediate corrective text feedback. Moreover, the system includes Adaptive Learning Feedback Loop which adjusts the user skill characteristics with the recommendation model according to the correct score in the measurement of the pose in the past sessions. This new loop system will guarantee that soon recommended routines will be gradually adjusted to the proven facility of the user, making yoga safer and more efficient, as well as encouraging long-term participation of the user.

Created

1/12/2026, 1:46:55 PM

Last Modified

1/12/2026, 1:47:46 PM

Authors

Dr Varija B (MLR Institute of Technology) <varija.vv@mlrinstitutions.ac.in>

Maanasa Adusumalli (MLR Institute of Technology) <maanasa.adusumalli29@gmail.com>

Praveen Lunavath (MLR Institute of Technology) <lunavathpraveen21@gmail.com>

Sumit Joshi (MLR Institute of Technology) <2005sumitjoshi@gmail.com>

Sushanth Pathipati (MLR Institute of Technology) <sushanthpathipatisushanth@gmail.com>

Primary Subject Area

Data Science & Analytics

Secondary Subject Areas

Artificial Intelligence & Machine Learning

Submission Files

YogaSensei RP(1).pdf (454.8 Kb, 1/12/2026, 1:46:38 PM)

Submission Questions Response

1. Undertaking

By submitting a manuscript, the authors agree to the policies of ICNDSA-2026. Please make sure you have selected the below-mentioned options before submission:

I have reviewed the "Instructions for Authors" on the ICNDSA-2026 website (<https://ieeencr.christuniversity.in/>).

I am aware that only registered authors receive notifications from the CMT portal. Therefore, I have ensured that all co-authors have been added to the CMT portal for this submission.

I confirm that the names and sequence of authors are accurate and understand that no further modifications are allowed.

Additionally, I certify that all co-authors' details, including their affiliations and email addresses, are correctly included in the main manuscript.

2. Conflict of interest

The authors declare no conflict of interest and all authors are aware of this submission. In case of any conflict submitting author will be responsible.

Agreement accepted

3. Status of using third-party material in your article.

Third party content is defined as any material within the manuscript which is not your original work. Third party content may consist of text passages, figures, photos, screenshots, etc. and be found in many places such as but not limited to - the Internet, print and online books and articles, theses, annual reports, conference material, photocopies, course packages, translations, visually impaired readers. In particular, pay close attention to sensitive images such as identifiable persons or human research participants, recognisable architecture, logos, brands/trademarks, and images from online photo libraries. Please refer to Springer Nature Guide to Copyright and Permissions for further guidance. You are responsible for clearing the rights for third party content under your publishing agreement. Please confirm if your manuscript contains any third-party content?

I am not using third-party

4. Certificate of originality

This is to certify that my submitted research paper is an outcome of my research work. I have duly acknowledged all the sources from which the ideas and extracts have been taken. The submitted paper is free from plagiarism and has not been submitted elsewhere for publication. I am aware that the publisher/conference organizer can reject it at any publication stage if the similarity is >10%.

Agreement accepted

5. Contact number

Please provide the Contact number of the Corresponding Author, including the Country code.

+91 9542477799

6. Country Name

Please provide the Name of the country for all authors, separated by a comma.

India
