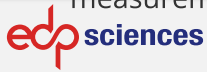


By using this website, you agree that EDP Sciences may store web audience

Yes No

measurement cookies and, on some pages, cookies from social networks. [More](#)



Journals

Books

Conferences

[information and setup](#)

EDPS Account



All issues Series
Forthcoming About

Search Menu

[All issues](#) ▶ Volume 328 (2025)

[◀ Previous issue](#)

[Table of Contents](#)

[Next issue ▶](#)

Free Access to the whole issue

EPJ Web of Conferences

Volume 328 (2025)

First International Conference on Engineering and Technology for a Sustainable Future (ICETSF-2025)

(Hybrid Mode) Amravati, Maharashtra, India, May 17-18, 2025

H. Liu, T.A. Tran, P.M. Jawandhiya and M. Ghonge (Eds.)

Export the citation of the selected articles [Export](#)

[Select all](#)

Open Access

Statement of Peer review

Published online: 18 June 2025

PDF (503 KB)

Open Access

Preface 00001

Haipeng Liu, Tien Anh Tran, Pradeep M. Jawandhiya and Mangesh Ghonge

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532800001>

[Abstract](#) | [PDF \(71.41 KB\)](#) | [NASA ADS Abstract Service](#)

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More information and setup](#)

Android-based Action Recognition with 3D CNN and UCF-101 dataset 01001

Abhijith Dasan, R. Darshan, Ashvyn Kumar, M. S. Minu and J. Arthy

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801001>

[Abstract](#) | [PDF \(539.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Enhanced Face Detection Using Multi-Cascade Face Detection and Deep Ladder Neural Network 01002

Anshul Pande and Priti Voditel

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801002>

[Abstract](#) | [PDF \(436.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Enhancing Online Fraud Detection: Leveraging Machine Learning and Behavioral Indicators for Improved Accuracy and Real-Time Detection 01003

Prasad Shaha and Vidya Gavekar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801003>

[Abstract](#) | [PDF \(500.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

From nature to computation: Bio-inspired optimization techniques and applications 01004

Chandrashekhar Goswami, Chin-Shiuh Shieh and Prasun Chakrabarti

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801004>

[Abstract](#) | [PDF \(1009 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Early Detection of Parkinson's Disease: Ensemble Learning for Improved Diagnosis 01005

Komal Raut and Vijaya Balpande

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801005>

[Abstract](#) | [PDF \(902.3 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

By using this website, you agree that EDP Sciences may store web audience

Yes No

measurement cookies and, on some pages, cookies from social networks. [More](#)

Published online: 18 June 2025

[information and setup](#)

DOI: <https://doi.org/10.1051/epjconf/202532801006>

[Abstract](#) | [PDF \(838.0 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Harnessing Deep Learning for Lung Cancer Detection and Prevention: A Comprehensive Survey 01007

Dipika Tidke and Satish S. Banait

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801007>

[Abstract](#) | [PDF \(324.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Shattering Stereotypes: VR's effects on learning and skill development for people with impairments 01008

Yusra, U. Ananthanagu and R. Shekar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801008>

[Abstract](#) | [PDF \(637.6 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

A Deep Learning Approach for Diabetic Retinopathy Classification Using Retinal Images 01009

Kavita Rathod-Jadhav and Aparna Pande

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801009>

[Abstract](#) | [PDF \(583.7 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Data Mining Techniques for Early Detection and Classification of Plant Diseases: An Optimization-Based Approach 01010

Swapnil Wagh and Ruchi Sharma

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801010>

[Abstract](#) | [PDF \(681.1 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

S. B. Warkad, D. A. Shahakar, K. A. Dongre and H. S. Kulat

[information and setup](#)

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801011>

[Abstract](#) | [PDF \(504.0 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Design of an Improved Model for Gear Fault Diagnosis Using Acoustic Data and EfficientNet-Based Deep Learning Process 01012

Shubham Bundele and P.V. Kane

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801012>

[Abstract](#) | [PDF \(892.1 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Probationary Confidence Value Mechanism for Trust-Based Autonomous Routing in MANETs with Sequence Number Validation 01013

V. B. Kute, M. K. Nichat, S. S. Sagane, P. G. Nemade, S. R. Choudhary and K. K. Chhajer

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801013>

[Abstract](#) | [PDF \(328.4 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Impact of Refuge on the Dynamical Behavior of a Tri-Trophic Food Chain Model Under Allee Effect in Prey Species 01014

Lokesh Kumawat and Harpreet Kaur

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801014>

[Abstract](#) | [PDF \(628.1 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Design of an Improved Model for Smart Grid Pricing Using ST-GNN-PNet and MAD-RL-StackelNet 01015

S. A. Jalit, S. B. Warkad, P. R. Rane and S. V. Bonde

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801015>

[Abstract](#) | [PDF \(662.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)
Mohammad Shahnawaz Shaikh, Neelesh Kumar Jain, Nileshkumar Patel, Dhanya Das, Anju Mahesh
and Snehal Thakor [information and setup](#)

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801016>

[Abstract](#) | [PDF \(604.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Performance Enhancement of Solar Water Distillation Using Rectangular Aluminium Fins 01017

P. B. Inglee, V. G. Goret, M. G. Walecha and A. W. Mahore

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801017>

[Abstract](#) | [PDF \(514.0 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

A Comprehensive Review on the Role of Vegetation in Open Channels and its Impact on Sediment Transport and Flow Dynamics 01018

Rutuja Vyawahare and Sandip Tatewar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801018>

[Abstract](#) | [PDF \(506.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Blockchain Based Shipment Tracking System 01019

Shrinivas Sonkar, Omkar Shinde, Harshal Rane, Pushkaraj Sahane and Prathamesh Shinde

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801019>

[Abstract](#) | [PDF \(599.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Action Recognition Using a Deep Neural Network for Video Surveillance 01020

Dhanwantari Thenge and Sandip Patil

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801020>

[Abstract](#) | [PDF \(363.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Enhancing Personalized Fitness: Integrating Large Language Model 01021

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

DOI: <https://doi.org/10.1051/epjconf/202532801021>

[information and setup](#)

[Abstract](#) | [PDF \(455.7 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Enhancing Business Success Prediction: A Data-Driven Machine Learning Model
01022

Arpit Deo, Manish Korde, Anant Tiwari, Anant Jain and Akash Choudhary

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801022>

[Abstract](#) | [PDF \(331.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Comparative analysis of machine learning classifiers and deep learning models for
categorization of Knee Osteoarthritis 01023

Arpit Deo, Manish Korde, Amit Khatri, Aman Jain, Ashish Kumawat and Vineeta Rathore

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801023>

[Abstract](#) | [PDF \(557.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

A Robust Ensemble Approach for Crop Recommendation Based on Environmental
Parameters 01024

Bharti S. Rinayat and Bhagyashri Dharaskar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801024>

[Abstract](#) | [PDF \(1.318 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Ai for anomaly detection in glacier movement identifying climate change effect
using machine learning 01025

Sukhmeen Kaur and Sunil Kumar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801025>

[Abstract](#) | [PDF \(461.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Class Balancing for Soil Data: Predictive Modeling Approach for Crop
Recommendation Using Machine Learning Algorithms 01026

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

DOI: <https://doi.org/10.1051/epjconf/202532801026>

[information and setup](#)

[Abstract](#) | [PDF \(526.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Enhanced Underwater Image Restoration and Clarity Optimization Using Advanced Digital Image Processing Techniques 01027

Punniyakotti Varadharajan Gopirajan, T. Pradeep and R. Charan

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801027>

[Abstract](#) | [PDF \(1.318 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Cloud Resilience: A Comprehensive Review of Infrastructure-as-a-Service Security Issues 01028

Nitin Chopde, Atul Raut, Shrikant Chaudhari, Yogesh Shelokar and Pratik Yawale

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801028>

[Abstract](#) | [PDF \(272.4 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Landscape Design Criteria for Children with Special Needs 01029

Amaal Elattar, Yasser Farghaly and Amr Atef Elhamy

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801029>

[Abstract](#) | [PDF \(2.105 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Transforming Healthcare: The Role of Machine Learning in Early Disease Detection – Innovations, Hurdles, and the Road Ahead 01030

Saginala Prasanth

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801030>

[Abstract](#) | [PDF \(438.7 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Improved Audio Separation Using U-Net and ICA 01031

Vagisha Gupta and K.R Seeja

Published online: 18 June 2025

By using this website, you agree that EDP Sciences may store web audience measurement cookies and, on some pages, cookies from social networks. [More](#)

Yes No

[information and setup](#)

Open Access

Hybrid Deep Learning-Based Security Model for Robust Intrusion Detection in IoT Networks 01032

Jayashri J. Patil and Ramkumar Solanki

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801032>

[Abstract](#) | [PDF \(531.3 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Robust Brain Tumour Classification: Comparative Deep Learning Analysis with Ensemble Modelling 01033

Aditya Verma and Disha Wankhede

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801033>

[Abstract](#) | [PDF \(568.7 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Prediction of Steering Angle in Autonomous Vehicles Using Deep Learning Approach 01034

Yogesh Karemore and Swati Dronkar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801034>

[Abstract](#) | [PDF \(1.014 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Brain Tumor Classification Using FCM, DenseNet, and SVM with Transfer Learning Techniques 01035

Vivek Rai and Nirupma Tiwari

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801035>

[Abstract](#) | [PDF \(854.1 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Improving Mental Health Diagnosis with Hybrid Ensemble Models: A Data-Driven Approach 01036

Sachin Malave, Bharti Khemani, Rucha Kelkar, Urvi Balekundri, Shravani Bogar and Areen Kolekar

Published online: 18 June 2025

By using this website, you agree that EDP Sciences may store web audience measurement cookies and, on some pages, cookies from social networks. [More](#)

Yes No

[information and setup](#)

Open Access

A Comparative Study of Honda and Toyota Brands in Hybrid Vehicle Sustainability Using the Competitive Profile Matrix (CPM) Framework 01037

Karina Aginta Putri, Kartika Syukla Nasukha, Maria Yosefa Febriyanti and Sofiani Rasyid

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801037>

[Abstract](#) | [PDF \(388.5 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Nutrient deficiency detection and classification in coffee leaves using deep learning models 01038

Lalita Randive, Shubhangi Sapkal and Deepak Bornare

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801038>

[Abstract](#) | [PDF \(540.4 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Windows Sphere: Multi-Modal Operating System Control for Disability Support using Artificial Intelligence 01039

R. Sudharsanan, Aayush Mishra, Bhuvanesh Barua, Prateek Rane and Gopirajan PV

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801039>

[Abstract](#) | [PDF \(515.4 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Video-Based Facial Emotion Recognition using YOLO and Vision Transformer 01040

Vidhi Sareen and K.R. Seeja

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801040>

[Abstract](#) | [PDF \(415.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Deep Learning Approaches for Retinal Disease Diagnosis: Insights from Fundus and OCT Analysis 01041

Sarvesh Kumar, Vipul Dixit and Madhuri Gupta

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801041>

By using this website, you agree that EDP Sciences may store web audience

Yes No

measurement cookies and, on some pages, cookies from social networks. [More](#)

- Open Access** [information and setup](#)

A Competitive Profile Matrix analysis of emerging electric vehicle models: Advancing sustainable urban mobility in Indonesia, insights from Wuling and BYD brands 01042

Arfan Ahmad Bagusputra, Berith Atmaodi, Muhammad Farid Syaifullah and Moch. Stiawan Joddy

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801042>

[Abstract](#) | [PDF \(485.5 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

- Open Access**

Indian Legal Judgment Summarization using LEGAL-BERT and BiLSTM model with Adaptive Length 01043

Varsha Naik and K. Rajeswari

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801043>

[Abstract](#) | [PDF \(376.3 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

- Open Access**

Detection of Diseases in Malvaceae Family plants using Enhanced Deep Learning Algorithm with Color Level Descriptor 01044

Mangesh K. Nichat and Sanjay Yedey

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801044>

[Abstract](#) | [PDF \(352.5 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

- Open Access**

OncoFusion: Multi-Model Approach for Generalized and Ovarian Cancer Detection with Stacked Ensembles 01045

Sarika Zaware, Rutuja Neharkar, Ayesha Sayyad, Aarya Patil and Salma Mulla

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801045>

[Abstract](#) | [PDF \(704.5 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

- Open Access**

Bridging the Security Gap in SDLC: Challenges and Solutions for Local IT Firms in Bangladesh 01046

Fatima Ibrahim, Youhana Ebnul Ashfaque, Md. Roknuzzaman, Merajul Islam, Sadia Jaman Sumi, Nujhat Nahar and Mahady Hasan

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

[Abstract](#) | [PDF \(459.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)
[information and setup](#)

Open Access

Advances in Cybersecurity: A Comprehensive Review of Emerging Threats and Defense Mechanisms 01047

Sandeep M. Jadhav, Rachana V. Mahule and Aditya P. Sontakke

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801047>

[Abstract](#) | [PDF \(328.8 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Predictive Framework for Sustainable Engineering through Machine Learning and Cross-Sector Collaboration 01048

Abhik Choudhary, Upasana Adhikari, Dipankar Roy, Subir Gupta, **Priyanka Roy** and Aparna Bhaduri

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801048>

[Abstract](#) | [PDF \(561.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Delay Normalization Technique to Disrupt Covert Timing Channels Using Active Warden 01049

Vrushali Uday Uttarwar and Dhananjay M. Dakhane

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801049>

[Abstract](#) | [PDF \(487.6 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Enhancing biodiversity monitoring with CNN: Invasive plant species detection 01050

Mukunda Sri Konatham, Jayasree marrapu and M. Gopinath

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801050>

[Abstract](#) | [PDF \(589.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Efficient Classification of Pomegranate Diseases Using Deep Learning Models and Interactive Visualization 01051

Gaurav Mishra, Jagruti Nagaonkar, Harsh Parmar and Gaurav Joshi

Published online: 18 June 2025

By using this website, you agree that EDP Sciences may store web audience measurement cookies and, on some pages, cookies from social networks. [More](#)

Yes No

[information and setup](#)

Open Access

Computer-Aided Diagnosis Techniques for Brain Tumor Segmentation and Classification Using MRI 01052

A. B. Gadicha, Prachi V. Kale, G. D. Dalvi, M. M. Mohod, S. C. Pakhale and S. M. Khan

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801052>

[Abstract](#) | [PDF \(497.0 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

AI-Powered Human Activity Recognition for Real-Time Detection of Inactive Workers in the Workplace 01053

Arina Noor Abdul Sayeed and Devishree Rohit Naidu

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801053>

[Abstract](#) | [PDF \(788.6 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Analysis of Hybrid Car Competitiveness in Indonesia: A Comparative Study of Toyota Hybrid and Suzuki Hybrid 01054

Aditya Wibowo, Naufa Asyraf, Muhammad Fahmi and Sigit Wibowo

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801054>

[Abstract](#) | [PDF \(314.5 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Universal IoT-Enabled Smart Battery Charging Optimization: Leveraging AI, Automata Theory, and Real-Time Data for Enhanced Lifespan and Efficiency 01055

Divyansh Arora, Ananya Goswami, Mritunjay Ranjan and Arif Md Sattar

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801055>

[Abstract](#) | [PDF \(1.726 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

A Novel Quantum-Enhanced Algorithm for Dynamic Soil Microbiome Optimization to Boost Agriculture 01056

Anshit Mukherjee

Published online: 18 June 2025

By using this website, you agree that EDP Sciences may store web audience measurement cookies and, on some pages, cookies from social networks. [More](#)

Yes No

[information and setup](#)

Open Access

Hybrid Automata-Based Control Framework for Real-Time Optimization in Space-Based Solar Power Transmission 01057

Ankita Patil, Mritunjay Ranjan, Kalyani Deore, Pranjal Sonje, Kiran Patil and Rutuja Patil

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801057>

[Abstract](#) | [PDF \(1.200 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Ergonomic Evaluation of Conventional Rural Flour Mills in India: Challenges and Recommendations 01058

Kishor Gawande, Somdatta Tondre, Niraj Raja and Rajesh Pokale

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801058>

[Abstract](#) | [PDF \(871.5 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

ChestXFusionNet: A Multimodal Deep Learning Framework for Predicting Chest Diseases from X-ray Images and Clinical Data 01059

Nivedita Shimbre and Ram Kumar Solanki

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801059>

[Abstract](#) | [PDF \(874.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

A Hybrid Automata-Driven Machine Learning Framework for Real-Time Energy Optimization in Smart Buildings 01060

Rajashri Rikame, Mritunjay Kr. Ranjan, Monali Jadhav, Shrushti Wankhede, Sakshi Bankar and Pranjal Bachhav

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801060>

[Abstract](#) | [PDF \(1.209 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

A Review Towards the Changing Landscape of Financial Institutions by Using Blockchain Technology 01061

V. B. Gadicha and R. A. Kapdiya

By using this website, you agree that EDP Sciences may store web audience

Yes No

measurement cookies and, on some pages, cookies from social networks. [More](#)
Abstract | PDF (431.8 KB) | [References](#) | [NASA ADS Abstract Service](#)
[information and setup](#)

Open Access

RETRACTED: Beyond Traditional Prenatal Monitoring: An Intelligent IoT-Based Pre-eclampsia Detection 01062

Mohammad Shahnawaz Shaikh, Ashwini Kumar Jha, Yogendra Singh, Neelesh Kumar Jain, Amarjit Seal and Akruti Pandwal

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801062>

Abstract | PDF (1.099 MB) | [NASA ADS Abstract Service](#)

Open Access

Ritual Ecologies: Analyzing the Environmental Impact and Cultural Sustainability of Death Practices Across Civilizations through Selected Case Studies 01063

Shashi Pathak and Richa Mishra

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801063>

Abstract | PDF (263.0 KB) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Leveraging AI Technology to Analyze the Impact of Customer Participation on Value Creation in Sustainable Systems 01064

Reepu

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801064>

Abstract | PDF (311.2 KB) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Emerging Trends in Database Design: Toward Improved Modeling and Development Practices 01065

Aparna S Bhande, Nidhi J. Sharma and Sujata V Barabde

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801065>

Abstract | PDF (266.4 KB) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Privacy-Preserving Federated Learning in Healthcare, E-Commerce, and Finance: A Taxonomy of Security Threats and Mitigation Strategies 01066

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

Published online: 18 June 2025

[information and setup](#)

DOI: <https://doi.org/10.1051/epjconf/202532801066>

[Abstract](#) | [PDF \(857.1 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

[Open Access](#)

General Guidelines for Utensil/Clothes Washing Workstation to Reduce Risk of Musculoskeletal Disorders Among Indian Domestic Workers 01067

Somdatta Tondre, Rajesh S. Pokale, Kishor R. Gawande and Niraj N. Raja

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801067>

[Abstract](#) | [PDF \(273.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

[Open Access](#)

Harnessing Transfer Learning for Rapid Malware Family Classification in Large-Scale Cyber Datasets 01068

Rishabh Mohan and Himanshu Gupta

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801068>

[Abstract](#) | [PDF \(525.4 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

[Open Access](#)

Data Anonymization and Privacy Preservation in Healthcare Systems 01069

Krishnasheesh Datta and Himanshu Gupta

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801069>

[Abstract](#) | [PDF \(731.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

[Open Access](#)

Air Quality Prediction Model for Monitoring AQI 01070

Aritra Das and Himanshu Gupta

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801070>

[Abstract](#) | [PDF \(608.0 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

[Open Access](#)

Design of an Iterative AI-Driven Latency Prediction and QoS-Aware Task Scheduling in Mobile Edge Computing: A Federated and Reinforcement Learning Process 01071

Garima Sharma, Rashi Khare, Neha Kulkarni, Sanjay Pagare and Vanshika Tiwari

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

[Abstract](#) | [PDF \(1.526 MB\)](#) | [References](#) | [NASA ADS Abstract Service](#)
[information and setup](#)

Open Access

Design of an Improved Model for Personalized Adaptive E-Learning Using Context-Aware Federated Learning and Hierarchical Semantic Graph Analysis 01072

Udandaroo Sirisha, Bhukya Krishna and Chappa Ramesh

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801072>

[Abstract](#) | [PDF \(626.2 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Design of an Improved Model Using Neuro-Symbolic Encoding and Federated Meta-Adaptation for Plant Disease Detection and Explanation Process 01073

Prajakta Kurhe and Pankaj Dashore

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801073>

[Abstract](#) | [PDF \(635.9 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

IoT Integrated Graphene Derivative-Based Capacitive Sensors with Machine Learning Classification for Precision Soil Moisture Monitoring Process 01074

Neema Amish Ukani, Shelej Khera and Saurabh S. Chakole

Published online: 18 June 2025

DOI: <https://doi.org/10.1051/epjconf/202532801074>

[Abstract](#) | [PDF \(886.6 KB\)](#) | [References](#) | [NASA ADS Abstract Service](#)

Open Access

Retraction Notice: Beyond Traditional Prenatal Monitoring: An Intelligent IoT-Based Pre-eclampsia Detection 01075

Mohammad Shahnawaz Shaikh, Ashwini Kumar Jha, Yogendra Singh, Neelesh Kumar Jain, Amarjit Seal and Akruiti Pandwal

Published online: 04 August 2025

DOI: <https://doi.org/10.1051/epjconf/202532801075>

[Abstract](#) | [PDF \(175.5 KB\)](#) | [NASA ADS Abstract Service](#)

By using this website, you agree that EDP Sciences may store web audience measurement cookies and, on some pages, cookies from social networks. [More information and setup](#)

Yes No

eISSN: 2100-014X



[Mentions légales](#)

[Contacts](#)

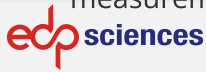
[Privacy policy](#)

A Vision4Press website

By using this website, you agree that EDP Sciences may store web audience

Yes No

measurement cookies and, on some pages, cookies from social networks. [More](#)



Journals

Books

Conferences

[Information and setup](#)

[EDPS Account](#)



EPJ Web of Conferences

All issues Series
Forthcoming About

[Search](#) [Menu](#)



[All issues](#) ▶ [Volume 328 \(2025\)](#) ▶ [EPJ Web Conf., 328 \(2025\) 01048](#) ▶ [Abstract](#)

Open Access

Issue	EPJ Web Conf. Volume 328, 2025 First International Conference on Engineering and Technology for a Sustainable Future (ICETSF-2025)
Article Number	01048
Number of page(s)	13
DOI	https://doi.org/10.1051/epjconf/202532801048
Published online	18 June 2025

EPJ Web of Conferences **328**, 01048 (2025)

<https://doi.org/10.1051/epjconf/202532801048>

Predictive Framework for Sustainable Engineering through Machine Learning and Cross-Sector Collaboration

Abhik Choudhary¹, Upasana Adhikari¹,
Dipankar Roy¹, Subir Gupta^{1*}, Priyanka Roy²
and Aparna Bhaduri²

Table of Contents

Article contents

[Abstract](#)

[PDF \(561.2 KB\)](#)

[References](#)

Database links

[NASA ADS Abstract Service](#)

Metrics

[Show article metrics](#)

Services

Same authors

- [Google Scholar](#)

- [EDP Sciences database](#)

[Recommend this article](#)

[Download citation](#)

Related Articles

[AI-Driven Predictive Health Monitoring and Early Warning Systems for Enhanced Soldier Safety in IoT-Enabled Wearable Devices](#)

E3S Web of Conferences 619, 03003 (2025)

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)

Department, 721657, Haldia, West Bengal, India
² Dr. B. C. Roy Engineering College, Department of IT, 713206, Durgapur, West Bengal, India

* Corresponding author: subir2276@gmail.com

Published online: 18 June 2025

Abstract

Accomplishing Sustainable engineering rests on careful collaboration across disciplines to solve challenges of the modern world; this includes climate change, resource management, and socio-economic issues. Still, collaboration across the different sectors of AIG (academia, industry, and government) is poorly integrated due to operational silos and structures lacking a centralized data-driven approach. This research proposes a new methodology based on ensemble machine learning, assessing, and predicting the outcomes of engineering projects with real-time open-source data focused on sustainability. Unlike traditional rule-based and qualitative evaluations, the proposed method measures diverse parameters like funding streams, policy advocacy, and stakeholder participation to construct a comprehensive model of collaboration at cross-sectoral levels. Harvested public data was normalized, encoded, and pre-processed class balances using SMOTE. An Extra Trees Classifier was trained to perform binary classification of project success deemed as primary indicators, evaluating performance through accuracy, precision, recall, F1 score, log loss, and MSE. The model achieved 96% accuracy and 0.733 F1 score. Feature importance analysis corroborated interpretability of model predictions. These results underscored the drivers of effective collaboration while showcasing the model's robust predictive capacity. Beyond bridging the literature gap, this

Innovative Business Models for Electric Mobility-as-a-Service in Smart Cities

E3S Web of Conferences 619, 01001 (2025)

More

Bookmarking



 [Reader's services](#)

 [Email-alert](#)

By using this website, you agree that EDP Sciences may store web audience

Yes

No

measurement cookies and, on some pages, cookies from social networks. [More](#)
strategic planning, resource distribution, and [information and setup](#)
governance in sustainable engineering.

© The Authors, published by EDP Sciences, 2025



This is an Open Access article distributed under the terms of the [Creative Commons Attribution License 4.0](#), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

EPJ Web of Conferences

eISSN: 2100-014X



edp sciences

[Mentions légales](#)

[Contacts](#)

[Privacy policy](#)

A Vision4Press website