



(<http://ipindia.nic.in/index.htm>)



(<http://ipindia.nic.in>)

## Patent Search

Invention Title	MACHINE LEARNING BASED APPROACH TO STUDY THE POSITIVE ASPECTS OF VARIOUS BIOENERGY SYSTEMS
Publication Number	11/2023
Publication Date	17/03/2023
Publication Type	INA
Application Number	202341013318
Application Filing Date	28/02/2023
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	A61B 010600, A61B 050000, G06N 030800, G06N 050200, G06N 200000

### Inventor

Name	Address	Country
Mrs. Gadde Mamatha	Assistant Professor, Department of Computer Science and Engineering, Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology, Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad – 500090, Telangana, India	India
Mrs. Garikapati Seshu Kumari	Associate Professor, Department of Computer Science and Engineering, Malla Reddy Institute of Technology and Science, Kompally, Hyderabad - 500100, India	India
Mr. Remalli Naveen	Assistant Professor Department of Computer Science and Engineering, Malla Reddy Institute of Technology and Science, Kompally, Hyderabad - 500100, India	India
Mr. Sabavath Raju	Assistant Professor, Department of Computer Science and Engineering, Pallavi Engineering College, Kuntloor, Hyderabad – 501505, Telangana, India	India
Mr. Addagatla Prashanth	Assistant Professor, Department of Electronics and Communication Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad – 500043, Telangana, India	India
Mr. Polepaka Anil Kumar	Assistant Professor, Department of Electronics and Communication Engineering, Malla Reddy Institute of Technology and Science, Kompally, Hyderabad - 500100, Telangana, India	India
Dr P. Dileep	Professor, Department of Computer Science and Engineering, Malla Reddy College of Engineering and Technology, Kompally, Hyderabad - 500100, Telangana, India	India
Ms. P. Revathy	Assistant Professor, Department of Computer Science and Engineering, Narsimha Reddy Engineering College, Kompally, Hyderabad - 500100, Telangana, India	India
Mr. Ganesh Naidu Ummadisetti	Assistant Professor, Department of Computer Science and Business system, B. V. Raju Institute of Technology, Narsapur, Medak – 502313, Hyderabad, Telangana, India	India
Mr. Syed Muqthadar Ali	Senior Assistant Professor, Department of Computer Science and Engineering CVR College of Engineering, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (D), Telangana – 501510, India	India

### Applicant

Name	Address	Country
Mrs. Gadde Mamatha	Assistant Professor, Department of Computer Science and Engineering, Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering & Technology, Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad – 500090, Telangana, India	India
Mrs. Garikapati Seshu Kumari	Associate Professor, Department of Computer Science and Engineering, Malla Reddy Institute of Technology and Science, Kompally, Hyderabad - 500100, India	India
Mr. Remalli Naveen	Assistant Professor Department of Computer Science and Engineering, Malla Reddy Institute of Technology and Science, Kompally, Hyderabad - 500100, India	India
Mr. Sabavath Raju	Assistant Professor, Department of Computer Science and Engineering, Pallavi Engineering College, Kuntloor, Hyderabad – 501505, Telangana, India	India
Mr. Addagatla Prashanth	Assistant Professor, Department of Electronics and Communication Engineering, Institute of Aeronautical Engineering, Dundigal, Hyderabad – 500043, Telangana, India	India
Mr. Polepaka Anil Kumar	Assistant Professor, Department of Electronics and Communication Engineering, Malla Reddy Institute of Technology and Science, Kompally, Hyderabad - 500100, Telangana, India	India
Dr P. Dileep	Professor, Department of Computer Science and Engineering, Malla Reddy College of Engineering and Technology, Kompally, Hyderabad - 500100, Telangana, India	India
Ms. P. Revathy	Assistant Professor, Department of Computer Science and Engineering, Narsimha Reddy Engineering College, Kompally, Hyderabad - 500100, Telangana, India	India
Mr. Ganesh Naidu Ummadisetti	Assistant Professor, Department of Computer Science and Business system, B. V. Raju Institute of Technology, Narsapur, Medak – 502313, Hyderabad, Telangana, India	India
Mr. Syed Muqthadar Ali	Senior Assistant Professor, Department of Computer Science and Engineering CVR College of Engineering, Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Rangareddy (D), Telangana – 501510, India	India

#### Abstract:

Bioenergy is widely considered a sustainable alternative to fossil fuels. However, large-scale applications of biomass-based energy products are limited due to challenges in feedstock variability, conversion economics, and supply chain reliability. Machine learning has proven to be a powerful tool for deriving insights from data. In this paper, we describe ways in which machine learning has been leveraged to facilitate the development and operation of sustainable energy systems. We first provide a taxonomy of machine learning paradigms and techniques, along with a discussion of their strengths and limitations. We then provide an overview of existing research using machine learning for sustainable energy production, delivery, and storage. Finally, we identify gaps in this literature, propose future research directions, and discuss important considerations for deployment.

#### Complete Specification

#### We Claim:

1. Machine Learning Based Approach to Study the Positive Aspects of Various Bioenergy Systems claims to analyze the adaptability and flexibility of ML in the bioenergy context.
2. The conversation of claim 1 aims to assess the recent applications of ML in bioenergy and biofuel conversion.
3. The conversation of claim 1 aims to identify the future direction of ML in bioenergy and biofuel conversion.
4. ML has the potential to predict and optimize the highly complicated nonlinear bioenergy systems, which are usually difficult to build models based on experiential data for accurate predictions.

[View Application Status](#)



Terms & conditions (<http://ipindia.gov.in/terms-conditions.htm>) Privacy Policy (<http://ipindia.gov.in/privacy-policy.htm>)  
 Copyright (<http://ipindia.gov.in/copyright.htm>) Hyperlinking Policy (<http://ipindia.gov.in/hyperlinking-policy.htm>)  
 Accessibility (<http://ipindia.gov.in/accessibility.htm>) Archive (<http://ipindia.gov.in/archive.htm>) Contact Us (<http://ipindia.gov.in/contact-us.htm>)  
 Help (<http://ipindia.gov.in/help.htm>)

Content Owned, updated and maintained by Intellectual Property India, All Rights Reserved.

Page last updated on: 26/06/2019