

IEEE JOURNAL OF BIOMEDICAL AND HEALTH INFORMATICS

J-BHI Special Issue on “Medical robotics vision through deep learning techniques”

In recent decades, the Deep Neural Network has grown increasingly popular throughout the area of computer vision. Convolutional Neural Network (CNN) is unquestionably the greatest image recognition algorithm. A deep neural network, especially, has been proven to be among the finest efficient approaches for photograph identification. The video game industry has gained prominent image recognition software combined with deep neural network technology to give players a complete perspective.

The Image Recognition Toolkit is a deep neural network-generating Machine Learning program. It uses an object recognition camera system to interpret and analyze trends in entities, users, places, and movements in photos on exact pixels. The image recognition version brings tangible importance by using the deep neural network technology algorithm towards the educational world by allowing younger learners to capture content more conveniently. For example, print options are available in image recognition programs, which fall under the deep neural network category and are based on machine learning. One such tremendously supports physically disabled or autistic pupils in reading the information. Supervised learning exploits deep neural networks to extract valuable image features from data. A pre-trained deep neural network, for instance, may be used to extract artifacts such as roughness from photographic images by employing image recognition. A visual representation of Deep neural networks is reshaping image recognition approaches. Deep neural networks perform a variety of functions, including image identification. Pattern recognition is the goal of deep neural networks, which are computational models that identify trends.

However, there is a stringent limitation on the width of the submitted image recognition. Most deep neural networks are built only to tolerate pictures of a specific size. This poses a multitude of issues during data collection and image implementation. Reshaping the input pictures to be fed through into networking is a frequent approach to address this constraint. Working with image recognition pictures is a feature of many typical pre-trained deep neural networks and collections. Deep Neural Networks are the most widely utilized framework for image recognition and tracking challenges. Deep neural networks are layered with modest neural collections that many see a significant percentage of an image. Exploring speed and training and testing sets capacity in image recognition are the two most important issues for a deep neural network. A deep neural network could have a machine learning model in developing an image recognition system from somewhere to generalize properly. It should also be capable of learning rapidly sufficient to meet the challenging circumstances while on the field. We invite submissions that approach futuristic deep neural network and system management solutions to enable secured autonomous services and applications.

Original research and review articles in this area are encouraged in the following topic areas including, but are not limited to,

- A Versatile Computational Compacting Platform for Integrating Robots Safe Management: Vision, Research Activities, Challenges
- The Convergence of Automation Systems Transportation Delivery: Adaptive Conceptual System Modeling and Enhanced Target Acquisition
- Beyond Analytics: Beam's Production and Impacts on Natural disasters of Modest Intensity
- A Comprehensive Critical View on Embryonic in the Rehabilitation of Progressive Reproductive Underperformance: Implications for the Future
- Enabling Intelligence Beyond Cloud Epigenetic modification in the Regeneration of Aggressive Developmental Deficiencies: A Systematic Crucial Analysis
- Building Real World Applications Computational Approaches for Concept of Cognition as a Foundation for Artificial Intelligence
- Challenges and Critical Issues in Manufacturing Technology Development using Personal information Understanding
- Shaping up Technological Trends and Breakthroughs for Transmission Component and Detect the presence and Quality
- Changing the Paradigm of Limitations, issues, and future trends: Image compressing and programming
- Challenges and Foresight in Emerging trends throughout the fields of image recognition and human-computer interaction
- Technological Trends and Breakthroughs for the Importance of Transfer learning, multilayer perceptron, optimization computation, information retrieval, pattern recognition, theoretical, computational methods
- New Advances in Smart Practices and Technologies for contemporary and technological calculus, stochastic techniques, computer method, indirect problems, solving differential equations
- Promises and Challenges of significant breakthroughs in sophisticated multimedia concealment and evidence
- Smart Practices and Technologies for Computational Approaches for Instrumentation and diagnostic tools together on a small scale
- Emergent Effects in Diagnostic Images: The Foundations of Quantitative Image Analysis & Properties And performance in Photogrammetry

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Key Dates

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First Reviews Due: 15th Aug, 2023

Revised Manuscript Due: 15th Oct, 2023

Final Decision: 15th Nov, 2023

