1. Motivation of the research.

2. Significance of the research.

3. Body of knowledge incorporated in the research.

4. Intellectual contribution in the research.

5. Future direction of this research.

1.Big data using cloud computing

1. Motivation of the research.

The characteristics of big data present data storage and data analysis challenges to businesses.

1. Significance of the research.

A cloud services provider can furnish the necessary storage space for substantially lower costs.

The processing needs can be met by cloud-service providers.

1. Body of knowledge incorporated in the research.

As related to big data, PaaS provides companies a platform for developing and using custom applications needed to analyze large quantities of unstructured data at a low cost and low risk in a secure environment.

1. Intellectual contribution in the research.

Common deployment models for cloud computing include platform as a service (PaaS), software as a service (SaaS), infrastructure as a service (IaaS), and hardware as a service (HaaS).

Cloud deployment solutions can provide services that businesses would otherwise not be able to afford.

5. Future direction of this research.

The major concerns regarding cloud computing are security and loss of control company’s big data is transferred to the cloud service provider.

Big data entails a huge commitment of hardware and processing resources, making adoption costs of big data technology prohibitive to small and medium sized businesses. Cloud computing offers the promise of big data implementation to small and medium sized businesses.

Three major reasons for small to medium sized businesses to use cloud computing for big

data technology implementation are hardware cost reduction, processing cost reduction, and

ability to test the value of big data. The major concerns regarding cloud computing are security and loss of control.

2.Big Data and Cloud Computing: Current State and Future Opportunities

1. Motivation of the research.

Introduce the state-of-the-art systems for scalable data management and analysis to us.

2.Significance of the research.

3. Body of knowledge incorporated in the research.

4.Intellectual contribution in the research.

5. Future direction of this research.

Designing scalable, elastic, and autonomic multitenant database systems is another important challenge that must also be addressed. In addition, ensuring the security and privacy of the data

outsourced to the cloud is also an important problem for ensuring the success of data management systems in the cloud.

3.Toward Detection of Child Exploitation Material: A Forensic Approach

1. Motivation of the research.

2. Significance of the research.

3. Body of knowledge incorporated in the research.

The proposed technique can

estimate age categorically - adult or child based on a new hybrid feature descriptor, called

Luminance Invariant & Geometrical Relation based Descriptor (LIGRD). LIGRD is composed of

some low and high-level features, which are found to be effective in characterizing the local

appearance in terms of chromaticity, texture, and geometric relational information of few

facial visual cues simultaneously.

1. Intellectual contribution in the research.

Comparison of our experimental results with that of another

recently published work reveals our proposed approach yields the highest precision and

recall, and overall accuracy in recognition.

This is the first of its kind which is able to recognize a child and adult face image effectively with

highest accuracy and thus paves the way for research in this area to not only help categorical

age detection, but also to identify real contents using contextual constraints in the detected

skin regions

5. Future direction of this research.

With the advent of sophisticated digital technology, Law Enforcement Agency

(LEAs) around the world dealing with child pornography facing real challenge to combat with

the technologically-savvy paedophiles.

The major challenge in child pornography lies in

authentic detection of children face in an image.

The main objective of this research is to

present a novel framework for a dedicated child face detection tool, where we will use child’s

face specific contextual contexts and visual cues that are based on new knowledge in terms

of features or contexts representatives of child’s skin and face.

4.Benefits of AWS in Modern Cloud

1. Motivation of the research.

The motivation of this research is to give us an overview of the benefits of AWS in the modern cloud and let us understand the importance of the AWS cloud.

2.Significance of the research.

It introduces us to the benefits of AWS cloud such as data protection, regulatory compliance, quantifiability, flexibility, cost-effectiveness, multiple storages, auto-scaling, access to the data anytime, data-centric encryption, high-performance processing.

3. Body of knowledge incorporated in the research.

4. Intellectual contribution in the research.

5. Future direction of this research.

5.Forensic Detection of Child Exploitation Material using Deep Learning

1. Motivation of the research.

Categorical age estimation by machine offers substantial extent of challenges and difficulty

to the computer vision community due to unavailability of complete knowledge on human

visual system.

2. Significance of the research.

we present a deep learning methodology, where machine learns the features straight away from the training images without having any information provided by humans to identify children faces.

3.Body of knowledge incorporated in the research.

this is a machine learning-based architecture that accomplish a categorization task with the aim of identifying a child

face, given a set of child and adult faces using classification technique based on extracted

features from the training images.

4. Intellectual contribution in the research.

Compared to the results published in a couple of recent work, our proposed approach yields the highest precision and recall, and overall accuracy in recognition.

5.Future direction of this research.

6.Real-time detection of children’s skin on social networking sites using Markov random field modelling

1. Motivation of the research.

In this paper, we propose a framework for detecting images containing children’s pictures in different poses, with the ultimate view of identifying and classifying images as corresponding to the COPINE scale.

1. Significance of the research.

In this paper, they develop an approach for automatic detecting children exploitation material being shared over social networks.

1. Body of knowledge incorporated in the research.

To achieve the goal of automatic detection, we present a novel stochastic vision model based on a Markov Random Fields prior, which will employ a skin model and human affine-invariant geometric descriptor to detect and identify skin regions containing pornographic contexts.

4. Intellectual contribution in the research.

This research paves the way for research in this area to not only help age detection, but also to identify real contents using contextual constrains in the detected skin regions.

5. Future direction of this research.

We have indicated how we can use our new methodology to detect the distribution of material in real-time on social networking sites.