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.

Cloud computing brings its own set of novel challenges that must be addressed to ensure the success of data management solutions in the cloud environment. to ensure the smooth transition of applications from traditional enterprise infrastructure to the next generation cloud infrastructure.

1. Significance of the research.

This tutorial presents an organized picture of the challenges faced by application developers and DBMS designers in developing and deploying internet scale applications. We crystallize the design choices made by some successful systems large scale database management systems, analyze the application demands and access patterns, and enumerate the desiderata for a cloud-bound DBMS.

1. Body of knowledge incorporated in the research.

We focus on the design issues inbuilding a DBMS for dealing with applications with single large databases. We refer to this as a large single tenant system. Intellectual contribution in the research.

Scalable database management systems (DBMS)—both for update intensive application workloads as well as decision support systems for descriptive and deep analytics—are a critical part of the cloud infrastructure and play an important role in ensuring the smooth transition of applications from the traditional enterprise infrastructures to next generation cloud infrastructures.

1. Intellectual contribution in the research.

State-of-the-art in scalable data management for traditional and cloud computing infrastructures for both update heavy as well as analytical workloads. Summary of current research projects and future research directions.

1. Future direction of this research.

Providing support for ad-hoc querying on top of a Key-Value store or providing consistency guarantees at different access granularities are some research efforts targeted towards enriching the functionality supported by Key-Value stores. Further research however is needed to generalize these proposals to different classes of applications and different Key-Value stores.

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

1. Motivation of the research.

With the development of the Internet, child pornography spreads on the Internet, but it is difficult to detect children's faces in pornographic images so we need to find a way to detect children's faces accurately.

2. Significance of the research.

This paper used the specific context and visual cues of child's face to propose a new framework for child's face detection tools

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. It 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.

4.Intellectual contribution in the research.

Comparison of 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.

5. Future direction of this research.

Future direction is that identify real contents using contextual constraints in the detected skin regions and categorical age detection with highest accuracy.

4.Benefits of AWS in Modern Cloud

The motivation of this paper 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.

It introduces the benefits of AWS cloud to us as follows:

Data Protection, Access Management, Regulatory Compliance, Flexibility, Cost Effectiveness, Secure backend services and platform, Increase Productivity, Increase Scalability, No to Piracy, Advanced technology and career opportunities, make life easier, Storage options in AWS cloud, speed up the workflows, Minimize IT workload, Different databases in AWS Stack, Auto-scaling and Automatic maintenance, Decrease Disaster Recovery Downtime, Getting edge over the competition

The flexibility and scalability are the key reasons why AWS cloud is different from any other cloud platform.

In AWS cloud you pay which service you choose. In another cloud platform, whether the

services are used or not, payment must be done for all. That is the advance of the AWS cloud

and make this different from any other providers.

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.