Latest Research Topics on Cloud Computing
Adaptive Computing-plus-communication Optimization Framework For Multimedia Processing In Cloud Systems

A joint computing-plus-communication optimization framework exploiting virtualization technologies, can be known as MMGREEN can be proposed. To improve energy efficiency in cloud data centers is to rely on traffic engineering techniques to dynamically adapt the number of active servers to the current workload.
A Two-level Load Balancing Method With Dynamic Strategy For Cloud Computing

A dynamic two-level scheduling method for cloud balancing can be presented. The method will not only focus on task scheduling, but will also consider resource utilization.
A Model To Evaluate The Credibility Of Service In Cloud Computing Environment

In this topic, a model to evaluate the credibility of services in cloud computing environments based on multi-factor can be proposed. The trust evidence, the scene and time will classified as service credibility impact factors.
In this topic, a provisioning strategy with data-location aware deployment for virtual cluster can be proposed, as to localize and provision the cluster near to the storage. This mechanism will reduce the network distance between virtual cluster and storage.
Truthful Workflow Scheduling In Cloud Computing Using Hybrid PSO-ACO

For such scheduling on the set of resources, a new truthful mechanism can be proposed. The new hybrid PSO-ACO algorithm can be implemented to achieve two main objectives minimizing cost and time.
An analytical model can be known as Cloud Terror Alert (CTA) can be developed and implemented it within a cloud-based environment that will analyze GTD data to aid collaboration and decision making by counter-terrorist security agents around the world.
Cloud Storage Architecture With Meta-data Service Layer In Cloud Computing

In order to improve the system reliability and performance, a cloud storage architecture with a meta-data service layer can be proposed. The architecture is a distributed file storage system based on the master-slave architecture, which will use multiple proxy servers of the meta-data server to establish a peer-to-peer meta-data service layer.
In this topic, a critical path based workflow scheduling algorithm for cloud computing environment can be proposed whose main aim is to meet the deadline by finding critical path tasks and reduce overall execution cost of workflow application.
A framework on demography, Cloud characteristics and learning styles for Cloud computing usage, documentation and productivity can be proposed. This work will use a systematic and methodological plan to coordinate research for optimum resource allocation.
A Proposed System Concept On Enhancing The Encryption And Decryption Method For Cloud Computing

A framework on demography, Cloud characteristics and learning styles for Cloud computing usage, documentation and productivity can be proposed. This work will use a systematic and methodological plan to coordinate research for optimum resource allocation.
A Method For Trust Management In Cloud Computing: Data Coloring By Cloud Watermarking

In this topic, a data coloring method based on cloud watermarking to recognize and ensure mutual reputations can be proposed.
An Efficient Cloud Storage Model For Cloud Computing Environment

A cloud storage model for cloud computing environment can be proposed. This model will consider the relation between the cloud structures; service provider, application, and user.
A New Cloud Computing Architecture For The Classification Of Remote Sensing Data

Here, a new distributed architecture for supervised classification of large volumes of earth observation data on a cloud computing environment can be presented. The architecture will support distributed execution, network communication, and fault tolerance in a transparent way to the user.
Adaptive Deadline Based Dependent Job Scheduling Algorithm In Cloud Computing

The objective of this work is to minimize the make span of the job, to improve the processor utilization irrespective with the cloud environment. Hence, a novel approach called Adaptive Deadline Based Dependent Job Scheduling (A2DJS) algorithm in cloud computing can be presented that will comprise of three major components as job manager, data center and VM creation.
Green Algorithm To Reduce The Energy Consumption In Cloud Computing Data Centers

A novel scheduling algorithm aimed at reducing energy consumption in cloud computing datacenters can be proposed, with the objective to save the environment.
A Parallel Random Forest Algorithm For Big Data In A Spark Cloud Computing Environment

A Parallel Random Forest (PRF) algorithm for big data on the Apache Spark platform can be presented. The PRF algorithm will be optimized based on a hybrid approach combining data-parallel and task-parallel optimization.
Utility Optimization Strategy Of Resource Scheduling In Cloud Computing

In this topic, a resource scheduling problem can be modeled as a UMM (Utility Maximization Model) to optimize the VM (Virtual Machine) placement policy and a GP (Gradient Projection) algorithm for solving Lagrange problem and optimization can be proposed.
Load Balancing Task Scheduling Based On Multi-population Genetic Algorithm In Cloud Computing

In this topic, a Multi-Population Genetic Algorithm (MPGA) considering load balancing can be adopted for solving task scheduling problems in cloud environment instead of Genetic Algorithm to avoid premature convergence. In order to boost the search efficiency, the min-min and max-min algorithm can be used for the population initialization.
A Distributed Autonomic Management Framework For Cloud Computing Orchestration

An autonomic framework to create virtual machines, migrations and heuristics can be proposed to select hosts to be activated or deactivated when needed.
General Framework For Task Scheduling And Resource Provisioning In Cloud Computing Systems

In this topic, a general framework for task scheduling and resource provisioning in cloud computing systems with dynamic customizability can be proposed.
A Mobile Cloud Computing Model Using The Cloudlet Scheme For Big Data Applications

Here, an efficient Mobile Cloud Computing model can be introduced based on the Cloudlet scheme. A master-cloudlet management scheme can be proposed to organize the communication between the cloudlets themselves.
A new block-based data distribution mechanism for cloud computing can be proposed. Instead of using the whole file as a unit of delivery, a file can be divided into blocks to improve the efficiency. A scheduling algorithm can also be designed to manage the delivery of blocks to all receivers.