Patent Search

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Inventor

Name	Address	Country
Mr.Hari Krishna Marrapu	Assistant Professor, Department of Information Technology, GMR Institute of Technology, Rajam, Andhra Pradesh, India. Pin Code: 532127	India
Dr.Murali Dhar M S	Associate Professor, Department of Computer Science and Engineering, School of Computing, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No.42, Avadi-Vel Tech Road Vel Nagar, Avadi, Chennai, Tamil Nadu. Pin Code:600062	India
Mr.Neeraj Kumar	Ph.D Research Scholar in School of Information Technology, UTD, RGPV, Bhopal, Madhya Pradesh, India. Pin Code:462033	India
Dr.Vijendra Pratap Singh	Assistant Professor, Department of Computer Science & Applications, Mahatma Gandhi Kashi Vidyapith, Varanasi, Uttar Pradesh, India. Pin Code:221002	India
Dr.Sagaya Aurelia	Department of Computer Science, CHRIST University, Bangalore, Karnataka, India. Pin Code:560029	India
Dr.K.Gurnadha Gupta	Assistant Professor, Department of CSE-H, KL Deemed to be University, Green fields, Vaddeswaram, Guntur, Andhra Pradesh, India. Pin Code:522502	India
Dr.Venkata Kishore Kumar Rejeti	Associate Professor, KKR & KSR Institute of Technology and Sciences, Vinjanampadu, Guntur District, Andhra Pradesh, India. Pin Code:522017	India
Mr.G.Manthru Naik	Associate Professor, Kallam Harinadha Reddy Institute of Technology, Chowdavaram, Guntur District, Andhra Pradesh, India. Pin Code: 522019	India
Mrs.C.Radhika	Assistant Professor, Department of ECE, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India. Pin Code:500079	India
Mr.H.M.Naveen	Assistant Professor, Department of Mechanical Engineering, RYM Engineering College, Ballari, Karnataka, India. Pin Code:583104	India

Applicant

Name	Address	Country
Mr.Hari Krishna Marrapu	Assistant Professor, Department of Information Technology, GMR Institute of Technology, Rajam, Andhra Pradesh, India. Pin Code: 532127	India
Dr.Murali Dhar M S	Associate Professor, Department of Computer Science and Engineering, School of Computing, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, No.42, Avadi-Vel Tech Road Vel Nagar, Avadi, Chennai, Tamil Nadu. Pin Code:600062	India
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Mrs.C.Radhika	Assistant Professor, Department of ECE, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India. Pin Code:500079	India
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Abstract:

The present invention relates to a cloud computing system for robotics control that enables real-time data processing and machine learning algorithms to be execute cloud server. The system includes a cloud server, a robotics control device, and a communication network that sends real-time data from the robotics control device t server for processing. The cloud server is equipped with machine learning algorithms such as deep neural networks, support vector machines, decision trees, or ranc which can be used to analyze and learn from the real-time data. Based on the analysis, the cloud server sends control commands back to the robotics control device behavior in real-time. This cloud-based system for robotics control offers numerous advantages over traditional on-device processing, including reduced latency, enh computing power, and improved flexibility. The system could significantly improve the performance of robotic systems, leading to enhanced capabilities and increase in a range of applications.

Complete Specification

Description:[001] The present invention relates robotics control systems and, more particularly, to a cloud computing system for robotics control that provides real- data processing and machine learning capabilities to enhance the performance and flexibility of robotic devices.

BACKGROUND OF THE INVENTION

[002] The following description provides the information that may be useful in understanding the present invention. It is not an admission that any of the inform provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[003] Traditional robotics control systems have been designed to perform data processing and analysis on the device itself, leading to limited computing power, and inflexibility. As robotic systems become more complex and capable, the need for enhanced computing power and real-time processing capabilities has become increasingly important. Cloud computing systems have emerged as a solution to this challenge, providing high-speed data processing and machine learning capabil that can be leveraged to enhance the performance of robotics control systems.

[004] Cloud computing has revolutionized the way that we store and process data. It allows us to store and access data remotely, and perform complex computa without the need for expensive hardware. Robotics control, on the other hand, is an essential aspect of robotics that deals with the control of robot motion and its interactions with the environment. The integration of cloud computing with robotics control presents several advantages such as scalability, cost-effectiveness, and accessibility. In this article, we explore the concept of a cloud computing system for robotics control.

[005] Cloud computing is a model for enabling convenient, on-demand access to a shared pool of configurable computing resources (e.g., networks, servers, sto applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. This model offers several k

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