1. A Review of Cloud Computing Technology Solution for Healthcare System.

Author details: Masrom, Maslin, and Ailar Rahimli

Year: 2014

Previously the traditional healthcare information system that used in the healthcare sector was the paper-based and then later it was replaced by the Healthcare Information System (HIS). However the HIS was found not perform effectively because of several issues such as storage capacity, system integration, high operating cost and system maintenance. Cloud computing is a new technology that deliver the software, infrastructure and computational platform as a service over the Internet in any place and any time. This technology has been said can solve many problems of the healthcare system such as increase the storage capacity and add new capability on the existing healthcare system. Cloud computing offers cost effective, increase interoperability and accessibility, optimize resources and integrate the healthcare information systems. It becomes a solution for solving the current issues, which lead to enhance functionality and features of the healthcare information systems. Therefore, the aim of this study is to explore the cloud computing technology as solution for healthcare information system issues. Issues such as data transmission, data storage, cost and maintenance issues are presented and described. The implications of this study then discussed.

1. Cloud Computing in Healthcare: A Space of Opportunities and Challenges.

Author details: HUCÍKOVÁ, Anežka, and Ankica Babic

Year:2016

Cloud computing is a model of self-service on-demand network access enabling delivering computing resources and services. Contemporary research shows that around 50% of healthcare companies from large hospitals to ambulatory services across the US and Europe have already deployed cloud technology. Since the technology is simultaneously evolving, more healthcare companies are expected to move their enterprise communication to the cloud. There is a need for a more complex understanding of opportunities and challenges for technology providers and healthcare organizations. Secondary, the poster aims to suggest how such specific challenges can be dealt with.

1. A descriptive literature review and classification of cloud computing research

Author Details:Yang, Haibo, and Mary Tate

Year:2012

We present a descriptive literature review and classification scheme for cloud computing research. This includes 205 refereed journal articles published since the inception of cloud computing research. The articles are classified based on a scheme that consists of four main categories: technological issues, business issues, domains and applications, and conceptualising cloud computing. The results show that although current research is still skewed towards technological issues, new research themes regarding social and organisational implications are emerging. This review provides a reference source and classification scheme for IS researchers interested in cloud computing, and to indicate under-researched areas as well as future directions.

1. Addressing cloud computing security issues

Author Details:Zissis, Dimitrios, and Dimitrios Lekkas

Year:2012

The recent emergence of cloud computing has drastically altered everyone’s perception of infrastructure architectures, software delivery and development models. Projecting as an evolutionary step, following the transition from mainframe computers to client/server deployment [models, cloud computing](https://www.sciencedirect.com/topics/computer-science/cloud-computing-model) encompasses elements from [grid computing](https://www.sciencedirect.com/topics/computer-science/grid-computing), utility computing and [autonomic computing](https://www.sciencedirect.com/topics/computer-science/autonomic-computing), into an innovative [deployment architecture](https://www.sciencedirect.com/topics/computer-science/deployment-architecture). This rapid transition towards the clouds, has fuelled concerns on a critical issue for the success of information systems, communication and information security. From a security perspective, a number of unchartered risks and challenges have been introduced from this relocation to the clouds, deteriorating much of the effectiveness of traditional protection mechanisms. As a result the aim of this paper is twofold; firstly to evaluate cloud security by identifying unique security requirements and secondly to attempt to present a viable solution that eliminates these potential threats. This paper proposes introducing a Trusted Third Party, tasked with assuring specific security characteristics within a cloud environment. The proposed solution calls upon [cryptography](https://www.sciencedirect.com/topics/computer-science/cryptography), specifically [Public Key Infrastructure](https://www.sciencedirect.com/topics/computer-science/public-key-infrastructure) operating in concert with SSO and LDAP, to ensure the authentication, integrity and confidentiality of involved data and communications. The solution, presents a horizontal level of service, available to all implicated entities, that realizes a security mesh, within which essential trust is maintained.

1. Security Challenges in Healthcare Cloud Computing: A Systematic Review.

Author Details: Mehraeen, Esmaeil, Marjan Ghazisaeedi, Jebraeil Farzi, and Saghar Mirshekari.

Year:2016

Healthcare data are very sensitive records that should not be made available to unauthorized people in order for protecting patient's information security. However, in progressed technologies as cloud computing which are vulnerable to cyber gaps that pose an adverse impact on the security and privacy of patients’ electronic health records and in these situations, security challenges of the wireless networks need to be carefully understood and considered. Recently, security concerns in cloud computing environment are a matter of challenge with rising importance