Abstract

With its on demand services model, cloud computing is making its way in every field and healthcare is no exception to it. Healthcare is readily moving its way to adaptation of cloud computing. This shift is to enjoy clouds services of minimized cost, effective use of resources and maximized availability of services. However, like other fields healthcare is hesitant to embrace the cloud computing environment due to concerns of data privacy, availability and data integrity. This paper provides a brief overview of opportunities and threats of cloud computing (CC) in healthcare industry. The major aim of this review paper is to find out the current and future opportunities and threats faced by the cloud services providers in healthcare.

References


- Momtahan, L.; Lloyd, S.; Simpson, A. Switched Lightpaths for E-Health Applications:
Computing Infrastructures. In Proceedings of the 6th International Workshop on Databases in
  - Hasan, J. Effective telemedicine project in Bangladesh: Special focus on diabetes health
Internet 2012, 4  643
  - Rayport, J. F.; Heyward, A. Envisioning the Cloud: The Next Computing Paradigm. A
MarketspaceNext Point of View. Available online: http://marketspacenext.
com/inthemedia/envisioning-the-cloud/ (accessed on 28 June 2012).
  - Introduction to Cloud Computing Architecture. Sun Microsystems: Santa Clara, CA,
USA, 2009.
com/articles/1632?_encoding=UTF8&jiveRedirect=1 (accessed on 28 June 2012).
  - Hosseini, A.; Sommerville, I.; Sriram, I. Research Challenges for Enterprise Cloud
  - Mei, L.; Chan, W. K.; Tse, T. H. A Tale of Clouds: Paradigm Comparisons and Some
Thoughts on Research Issues. In Proceedings of the Asia-Pacific Services Computing
Conference (APSCC’08), Yilan, Taiwan, 9–12 December 2008; pp. 464–469.
Patterson, D.; Rabkin, A.; Stoica, I.; Zaharia, M. Above the Clouds: A Berkeley View of Cloud
  - Sriram, I.; Khajeh-Hosseini, A. Research Agenda in Cloud Technologies. In
Proceedings of the 1st ACM Symposium on Cloud Computing, SOCC 2010, Indianapolis, IN,
USA, 10–11 June 2010.
In Proceedings of the Grid Computing Environments Workshop (GCE’08). Austin, TX,
USA, 12–6November 2008; pp. 1–10.
  - Chow, R.; Golle, P.; Jakobsson, M.; Shi, E.; Staddon, J.; Masuoka, R.; Molina, J.
Controlling Data in the Cloud: Outsourcing Computation without Outsourcing Control. In
Proceedings of the 2009 ACM Workshop on Cloud Computing Security, Chicago, IL, USA,
  - Pearson, S. Taking Account of Privacy when Designing Cloud Computing Services. In
Proceedings of the ICSE Workshop on Software Engineering Challenges of Cloud Computing at
140–148.
  - Flaen, Stephen. &quot;Information Security and the Cloud. &quot; (2012).
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Index Terms

Computer Science
Distributed Systems

Keywords

Cloud Computing (CC) Health Information Technology (HIT) Cloud Services Healthcare Provider Industry (HCI)
Privacy
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