

**MASTER'S PROJECT (SUMMER 2013)**

**TOPIC:** *A Cloud-Based Multimedia Information Storage and Retrieval System Using Windows Azure Platforms*

**PRESENTOR:** Alok Gadgil

**ADVISOR:** Dr. Haiping Xu

**DATE & TIME:** Friday, August 30 2013, 10:00 AM

**LOCATION:** Dion 305

**COMMITTEE MEMBERS:** Dr. Shelley Zhang and Dr. Ramprasad Balasubramanian

**ABSTRACT**

As Internet users are relying more and more on cloud-based technologies nowadays, cloud services are continuously gaining their importance in the field of service-oriented computing. Since cloud services allow users to access information ubiquitously, it is becoming more and more efficient and easy for users to move their data onto the cloud and manage it remotely by accessing it from all around the globe. Accessing information from anywhere at any time is just becoming a vital requirement for Internet users as web-based applications including electronic markets are getting flooded with new devices every day. In this project, we developed a prototype system for users to store multimedia information onto the Windows Azure cloud platforms, which can then be accessed from anywhere using Windows-based devices. The proposed system uses the techniques of Windows Azure Data Storage, JSON (JavaScript Object Notation) and RESTful web services, where the Windows Azure platform is used to store multimedia files through its blob storage and its table storage. The system consists of three major parts: the web server, the client and the data interchange format (DIF). The web server handles the RESTful web services that interact with the Windows Azure platform to perform the needed CRUD (Create, Read, Update and Delete) operations. The client consumes the web services to manipulate the data using a standalone GUI (Graphical User Interface) based application. A language independent DIF, namely JSON, is needed to send and receive data between the client and the server. The implemented prototype shows that users can easily upload and download multimedia information including text, image, audio and video files onto the cloud and access it from anywhere in the world.