

**NUS Graduate School for Integrative Sciences and Engineering
Research Project Write-up**

Title of Project : Multimedia E-Chronicles

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Short Description

An e-chronicle records events using multiple sensors and provides access to this data at multiple levels of granularity and abstractions, using appropriate access mechanisms in representations and terminology familiar to application users. Until a few years ago, it was natural to keep records or logs using alphanumeric techniques both in paper as well as in electronic forms. Electronic recording has made it easier and cheaper to keep multimedia records than human-reported alphanumeric records. With advances in processing, storage, and sensor technologies, it is now extremely easy to record disparate activities in different situations using different types of sensors.

The popularity of websites such as Flickr and YouTube are examples of this phenomenon. Thus, logging information has become easier and cheaper than ever. At a macro-level, nations zealously preserve archives and at a micro-level, families would therefore also like to preserve memories for posterity. Consequently, families are accumulating a mass of photographs and video/audio clips. How to manage this voluminous multimedia collection? How can one extract useful information from these multimedia logs? This is an urgent problem which needs to be tackled. This project aims to facilitate the handling of multimedia information recorded by families using events as fundamental unit for processing. This project aims to process audio, video, and photographs in order to enable intuitive organization, easy search and natural adaptive presentations out of them. This project can be viewed as the next link in the ongoing process of democratization of information access in human society.