

Project proposal template – Faculty studentships Summer 2014

<i>Project title</i>	Summarizing Videos	<i>Director of Study</i>	Paolo Remagnino
<i>Second Supervisor</i>	Dorothy Monekosso	<i>School</i>	Computing and Infor ▼
<i>Other members of supervisory team</i>	Vasilis Argyriou	<i>Any requirements from applicant (eg degree in specific subject area)</i>	first degree in computing, computer science, engineering, physics ▲ ☰ ▼

Project summary
(max 1,000 characters)

The capturing of videos has become widespread; most people capture videos either with cameras embedded in a smart phone or with conventional hand-held cameras. Each video clip contains megabytes of raw data and hour long capturing of video amounts to gigabytes, making their storage unmanageable. This means that sooner than later clips are removed to leave space to newer ones. People cannot remember all the videos they have captured and therefore deleted and potentially information is lost forever.

This project entails the design and implementation of novel methods to store and retrieve visual memories. The basic idea is to divide a video in episodes and then for each episode extract useful information that can be used to create similarities between video captures and allow a logical categorization of videos. Of great interest is the categorization of dynamic scenes.

The whole process can be studied with fixed and also moving cameras, implementing solutions for a variety of application domains, for private use, as in “what I filmed last summer holiday”, and for public use, for instance for video surveillance.