


## Dartmouth SIAM Student Chapter Presents

# Visual Recognition and Search in Gigantic Image Collections



**flickr** by Yahoo! The Tour Explore Sign In

- 100 billion photos
- 6 billion new uploads each month

**facebook** Search for people, places and things

**YouTube**

- more than 120M distinct videos
- 72 hours of video are uploaded to YouTube every minute

**Goal:** enable visual search in these image collections

By

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May 2nd 2013

Kemeny 004

6:00-7:30

Pizza will be served

**Abstract:** The last few years have seen a tremendous explosion of image and video data on the Web. Unfortunately only a small portion of this visual data is annotated with text. Even when tags are available, they are often not accurate, rendering traditional text-search ineffective. In this talk I will describe my recent work on designing visual recognition systems that can help users browse and search image repositories more effectively. Our approach centers around the learning of a compact image descriptor optimized to yield accurate visual recognition with linear classifiers, enabling real-time visual search in millions of images. I will also discuss how our image descriptor can be used to extract useful semantic content from pictures appearing in Web pages in order to boost the accuracy of keyword-based document search engines.

**Bio:** Lorenzo Torresani is an Assistant Professor in the Computer Science Department at Dartmouth College. He received a Laurea Degree in Computer Science with