Automated Tagging
Status of technology

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CEPIC 2015 Warsaw
WORLD’S OLDEST PHOTO ARCHIVE
ESTABLISHED IN FIRENZE, ITALY IN 1852
OVER 5.5M IMAGES PRIVATELY OWNED
PLUS 45M FROM THIRD PARTY PARTNER AGENCIES

WWW.ALINARI.COM
content selection
The principle of implicit tagging is to replace the user input by automatically finding descriptive tags for multimedia content, derived from an observer’s natural response.
Tagging should identify, possibly automatically and (hopefully) precisely, the most relevant icons/objects/gesture in a frame and assign the most relevant keywords.
Autotagging reduces the human intervention during the cataloguing process by identifying, in a quick and efficient way, relevant keywords. This is important also to cut-off labour costs for indexing that affect so much large content providers, libraries, etc.

As a general approach, for example for libraries and content providers, today's tendency is to provide initial set of auto-tagged keywords and then the indexing person refine and improve them manually.
Google, Facebook, Flickr, Instagram

......, all are putting more and more effort (and commercial opportunities) for auto-tagging.....
Flickr recent issue on auto-tagging

The famous train tracks leading into Auschwitz, which were labelled “sport” by Flickr’s algorithm. Photograph: Christopher Furlong/Getty Images

http://www.theguardian.com/technology/2015/may/20/flickr-complaints-offensive-auto-tagging-photos
Imagga and 6 alternative image recognition services

In a recent post on the newly introduced component of Wolfram’s language for image identification Imageldentify, Jordan Novet of Venture Beat conducted a quick test of Imageldentify against 5 deep learning platforms for image recognition.

Imagga: cup, mug, coffee mug, drinking vessel, beverage, punch, container, coffee, drink, vessel
Current (and latest) solutions for auto-tagging:

- Imagga
- Wolfram ImageIdentify
- CamFind
- Clarifai
- MetaMind
- Orbeus
- AlchemyAPI
Image Tagging API for building **scalable** solutions that understand images

api@imagga.com  twitter.com/imagga  facebook.com/imagga
3Y > 150Y

2B+ NEW PHOTOS SHARED EVERY DAY
The Status quo

Huge amount of user-generated content

NOT searchable

NOT monetizable
How to understand and organize all these photos?
Imagga’s Auto-Tagging API

You send the images to our Tagging API.

The API return the extracted tags to your system.
CATEGORY TAGGING

- Beaches & Seaside
- Nature & Landscape
- Sunrises & Sunsets
- Events & Parties
Value proposition

Automated solution

Makes images searchable

Replaces manual effort
Keyword tagging demos:

On Imagga’s Website
http://imagga.com/auto-tagging-demo

As an Adobe Lightroom Plug-in
http://wordroom.org/

iPhone Demo App Screencast
https://www.youtube.com/watch?v=J6a4uwsIHrk
How it works:

2700+ object classes recognition
deep-learning based

conceptual conclusions
e.g. ‘computer’ + ‘desk’ => ‘office’, ‘work’, ‘business’

semantic expansion
e.g. ‘car’ => ’vehicle’, ‘mean of transportation’
Upcoming features:

**improved object** recognition
refining the deep learning model and classes

**facial recognition**
based on per-user learning set of images

**feedback-loop**
immediate improvement of results via user feedback (add/remove keywords)

**landmark** recognition
recognizing popular landmarks in major cities around the world
Applicable for **Personal Photo Services**

- **Apps** for mobile photo organization
- **Cloud services** for consumers
- **Telecom** and **home media** solutions
- **OEM** with mobile device manufacturers
- **Profiling** users based on content
Integration and business model

Cloud
- monthly prepaid volume
- or
- per-server fee

or

On-premise
- volume based license
- +
- per machine setup & maintenance fee
How to get started:

Sign Up
for API access (https://imagga.com/pricing)

Get an API key
and start making calls immediately

Get creative
and take advantage of the returned tags
Thank you!

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