Outcomes 2011 and an outlook for
ImageCLEF 2012

Henning Müller[1], Theodora Tsikrika[1], Steven Bedrick[2], Hervé Goeau[3], Alexis Joly[3], Jayashree Kalpathy-Cramer[2], Jana Kludas[4], Judith Liebetrau[5], Stefanie Nowak[5], Adrian Popescu[6], Miguel Ruiz[7]

[1] University of Applied Sciences Western Switzerland (HES-SO), Sierre, Switzerland
[2] Oregon Health and Science University (OHSU), Portland, OR, USA
[3] IMEDIA, INRIA, France
[4] University of Geneva, Switzerland
[5] Fraunhofer Institute for Digital Media Technology, Ilmenau, Germany
[6] CEA LIST, France
[7] University of North Texas, USA

Overview

- Some results of ImageCLEF 2011
  - Comments from the participants
- General plans for ImageCLEF 2012
- Changes to existing tasks
- Tasks potentially ending
- New task proposals
- Conclusions

Results of ImageCLEF 2011

- Strong community around each one of the tasks
  - Wiki, photo, plants, medical
- Concentration on multimodal approaches
  - Language independent and/or multilingual
- Good participation
  - Over 40 groups submitting results, 140 registrations, many participants here in Amsterdam
- Very active discussions about techniques, tools, methodologies
- Demo session was much appreciated!
  - Lively discussions, should be done again, with posters

- Not everything is optimal
  - Number of queries should be higher
  - Deeper analysis should be performed
    - Also on a per topic basis
  - Many groups register and do not submit results
- This remains a voluntary effort and we need help of everyone involved

- http://www.imageclef.org/survey/

- Thank you to all the participants!!

- Task were generally rated as good and descriptions as clear
  - Allow for submitting more runs for some tasks
  - Create larger resources to show scalability
- Web page was appreciated (even though sometimes content was out of date)
  - Many accesses (>60'000 page views in a year)
- The registration system is generally regarded as fine
  - Allow to delete runs, update when news appear
  - Have possibility to change email address easily
  - Visually better appealing interface

- We plan to submit a proposal for an ImageCLEF 2012 lab at CLEF
  - Details can still be changed
  - We always need help in organizing this
- 4-5 tasks are the goal
  - New tasks to replace existing ones
  - Work on interesting challenges and create a community around these tasks
  - Additional propositions are still welcome
- Links with other labs
  - CLEF IP, maybe also PAN?

- **Medical** task
  - Larger hierarchy of modalities for modality detection
  - Maybe a better link between modality detection and image-based retrieval
  - More case-based topics

- **Plant** classification
  - Larger number species
  - Maybe add metadata, multimodal retrieval
  - Concentrating on real photos and not as much on well prepared scans

- **Wiki**pedia retrieval
  - Most likely with Theodora and Jana not fully clear about next jobs

- **Photo** annotation
  - Stefanie changing jobs, theseus project finishing
  - Task should continue but in a slightly modified format

- New photo annotation task
  - Particularly concept retrieval task has many challenges and possibilities, linked with the annotation task
  - More varied topics
  - Learning from very large but noisy training data
- Robot vision task
  - 3 camera and distance laser information to detect rooms based on information from a robot
- Wikimedia commons task
  - Among uploaded find those probable to be rejected
    - Training data of rejected images exist (violence, nudity, copyright restrictions)

Conclusions

- Very active community around ImageCLEF
  - Many discussions at the poster session, the demos, the dinners, …
- Web page and infrastructure could be improved but are generally fine
- Tasks and challenges are appreciated
  - Impact analysis suggests to change tasks after three years (database change, new challenges)
- Next year several tasks might be discontinued
  - … but there are several ideas for new tasks
  - We will keep you updated