

TREC Video Retrieval Evaluation

TRECVID 2013

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Silver Spring, MD

What is TRECVID?

Workshop series (2001 – present) → <http://trecvid.nist.gov>

to promote research/progress in content-based video analysis/exploitation

Foundation for large-scale laboratory testing

Forum for the

- exchange of research ideas
- discussion of approaches – what works, what doesn't, and why.

Focus: content-based approaches

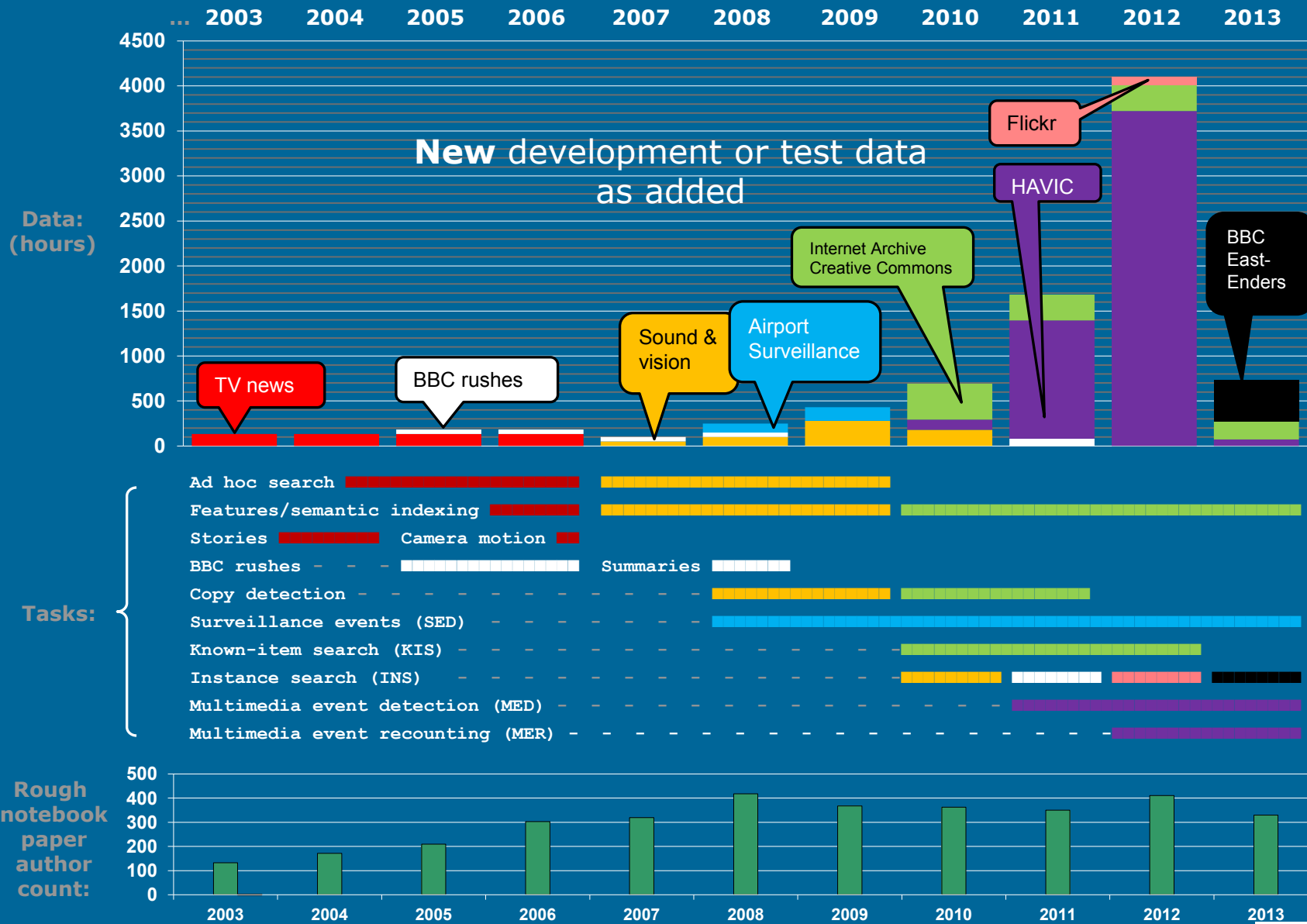
- search / detection / summarization / segmentation / ...

Aims for realistic system tasks and test collections

- unfiltered data
- focus on relatively high-level functionality (e.g. interactive search)
- measurement against human abilities

Provides data, tasks, and uniform, appropriate scoring procedures

TRECVID's Evolution



TRECVID 2013 Tasks and Data

<p>Internet Archive – Creative Commons (IACC)</p> <p><i>200 hours test data, video, title, keywords, description</i></p> <p><i>687 hours dev video, metadata</i></p>	<p>BBC EastEnders</p> <p><i>464 hours divided into 471527 shots</i></p>	<p>Airport surveillance</p> <p><i>50 hours, test video</i></p> <p><i>100 hours, dev video</i></p>	<p>HAVIC - Internet multimedia</p> <p><i>3722 hours, test video</i></p> <p><i>1429 hours, dev video</i></p>
<p>Semantic indexing (60 known test concepts submitted; 38 Evaluated, 10 for localization; 10 concept-pairs evaluated)</p>	<p>Instance search (30 ad hoc image test queries)</p>	<p>Surveillance event detection (interactive) (7 known test events, choose 3)</p>	<p>Multimedia event detection (20 pre-specified &/or 10 ad hoc complex test events)</p>
			<p>Multimedia event recounting pilot (10 events)</p>

TV2013 Finishers

PicSOM	---	MED	MER	---	SIN	Aalto U
AXES	SIN	MED	MER	---	SIN	Access to Audiovisual Media
ATTLabs	---	---	---	SED	---	ATT Labs Research
BIT	---	---	---	SED	---	Beijing Inst. of Technology
Inf	---	MED	MER	SED	SIN	Carnegie Mellon U
CEALIST	SIN	---	---	---	***	CEA
ITI_CERTH	SIN	MED	MER	---	SIN	Centre for Research and Technology Hellas
ccnysri	---	---	---	SED	---	City College of New York SRI-International Sarnoff
VIREO	SIN	MED	MER	---	SIN	City U of Hong Kong
dcu_savasa	---	---	---	SED	SIN	Dublin City U, U of Ulster, Vicomtech-IK4
iAD_DCU	SIN	---	---	---	---	Dublin City U, U of Tromso
EURECOM	---	---	---	---	SIN	EURECOM
VIDEOSENSE	---	---	---	---	SIN	EURECOM, LIRIS, LIF, LIG, Ghanni
TOSCA	***	***	---	---	SIN	EuropeOrganization(s)
FIU_UM	---	---	---	---	SIN	Florida International U, U of Miami
FHHI	---	---	---	---	SIN	Fraunhofer Heinrich Hertz Inst., Berlin
HFUT	---	---	---	---	SIN	Hefei U of Technology
IBM_Columbia	***	MED	MER	SED	SIN	IBM T. J. Watson Research Center
IRIM	SIN	***	---	---	SIN	Indexation et Recherche d'Information Multimédia
Quaero	---	***	---	---	SIN	INRIA, LIG, KIT
ARTEMIS	SIN	---	---	---	---	Institut Mines-Telecom; Telecom SudParis; ARTEMIS Dept
JRS	SIN	***	---	---	SIN	JOANNEUM RESEARCH Forschungsgesellschaft mbH
GENIE	---	MED	MER	---	---	Kitware, Inc.
BUPT_MCPRL	SIN	***	---	SED	***	Multimedia Communication and Pattern Recognition Labs
NII	SIN	MED	***	***	SIN	National Inst. of Informatics

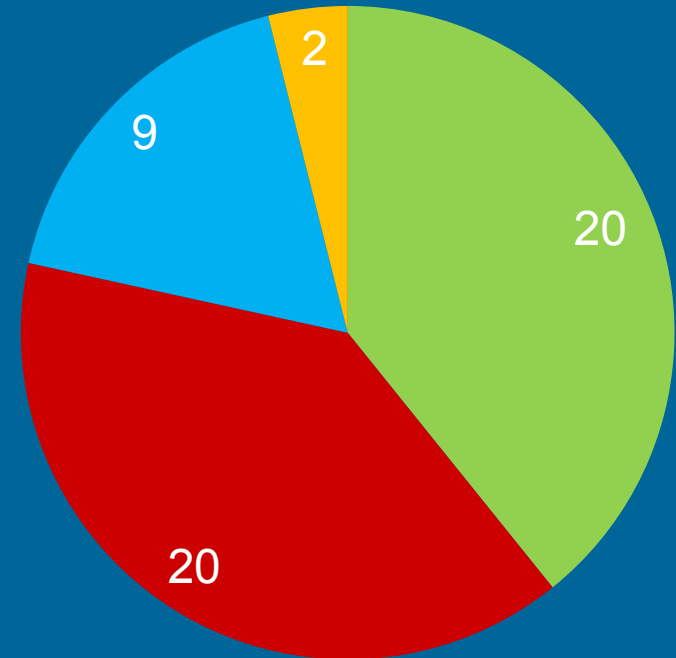
TV2013 Finishers

NHKSTRL	---	---	---	---	SIN	NHK (Japan Broadcasting Corp.)
ntt	---	---	---	---	SIN	NTT Media Intelligence Labs, Dalian U of Technology
NTT_NII	SIN	***	---	---	---	NTT, NII
ORAND	SIN	MED	---	***	---	ORAND S.A. Chile
FTRDBJ	SIN	***	***	---	SIN	Orange Labs International Centers China
IMP	SIN	---	---	---	---	Osaka Prefecture U
PKU_OS	---	---	---	SED	---	Peking U.-OS
PKU-ICST	SIN	***	---	***	***	Peking U.-ICST
Vis_QMUL	---	MED	---	---	---	Queen Mary, U of London
BBNVISER	---	MED	MER	---	---	Raytheon
SRI_SESAME	---	MED	MER	---	---	SRI International U of Amsterdam
SRIAURORA	---	MED	MER	---	SIN	SRI, Sarnoff, Central Fl. U., U. Mass., Cycorp, ICSI, Berkeley
TNO_M3	SIN	MED	---	---	---	TNO
TokyoTechCanon	SIN	MED	***	***	SIN	Tokyo Inst. of Technology Canon Inc.
MIC_TJ	SIN	---	---	---	---	Tongji U
thu.ridl	SIN	---	---	***	---	Tsinghua U School of Software
MindLAB	***	***	---	***	SIN	U Nacional de Colombia
MediaMill	SIN	MED	***	---	SIN	U of Amsterdam
UEC	***	***	---	---	SIN	U of Electro-Communications
UMass	---	MED	---	---	---	U of Massachusetts Amherst, U of Sci. Tech. Beijing
sheffield	SIN	---	---	---	SIN	U of Sheffield, Harbin Engineering U, PRC U
siegen_kobe_muro	---	MED	---	---	---	U of Siegen, Kobe U, Muroran Inst. of Technology
VIVA...	---	---	---	SED	---	VIVA research lab, U of Ottawa, Ecole Poly. de Montreal
NERCMS	SIN	---	---	---	---	Wuhan U

TV2013 Finishers

Unique finishing teams

Groups Finished	Task code	Task name
9	SED	Surveillance event detection
26	SIN	Semantic indexing
22	INS	Instance search
18	MED	Multimedia event detection
10	MER	Multimedia event recounting



- Asia
- Europe
- North America
- South America

Support

The running of TRECVID 2013 has been funded directly by:

- National Institute of Standards and Technology (NIST)
- Intelligence Advanced Research Projects Activity (IARPA)

TRECVID is only possible because of the additional efforts of many individuals and groups around the world.

Additional resources and contributions

- Georges Quénot and the QUAERO team
 - shared coordination of the semantic indexing task
 - provided the master shot reference for the IACC.2 video
 - arranged for ASR for IACC.2 video
 - organized judging of 50 concepts with support from the Quaero program
- Cees Snoek helped choose the SIN concept pairs
- Koichi Shinoda of the TokyoTechCanon team agreed to host a copy of the IACC.2 data
- The LIMSI Spoken Language Processing Group and VexSys Research provided ASR for the IACC.2 videos
- Noel O'Connor and Kevin McGuinness at Dublin City University along with Robin Aly at the University of Twente worked with NIST and Andy O'Dwyer plus William Hayes at the BBC to make the BBC EastEnders video available for use in TRECVID

Agenda: Day 1

- Arranged by task
- Time for discussion of approaches & evaluation
- Wednesday
 - Intros, thanks, etc.
 - Semantic indexing
 - Single concepts, pairs, localization
 - Lunch
 - Instance search
 - Workshop dinner

Agenda: Day 2

- Thursday
 - Multimedia event detection and recounting
 - Lunch
 - Multimedia event detection and recounting (conclusion)
 - Poster/demo boaster
 - Posters and demos

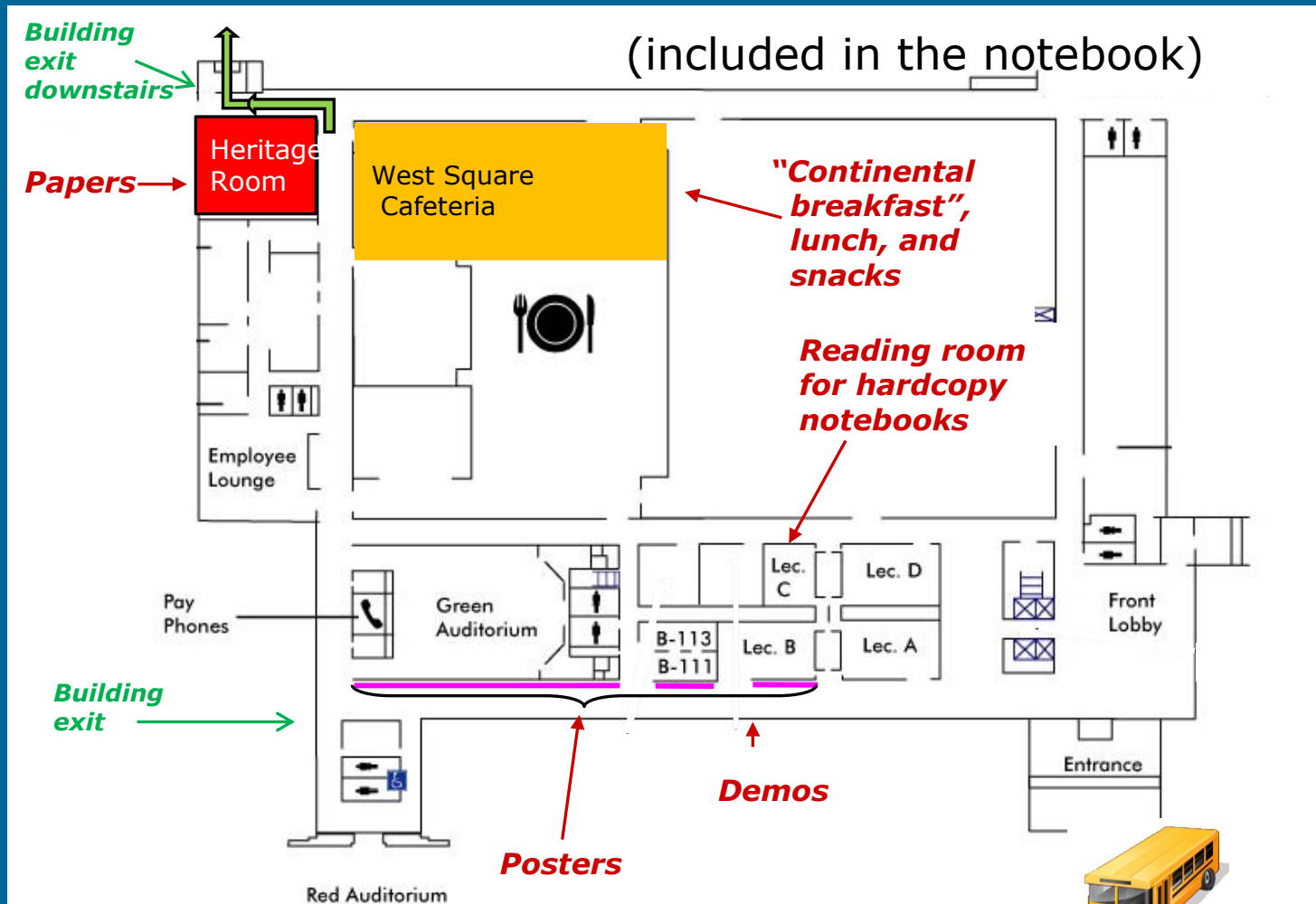
Agenda: Day 3

- Friday
 - Surveillance event detection
 - TRECVID planning
 - Workshop close
 - Lunch

2015 task proposals (due by 1 Feb 2014)

1. State the goals of the real world task being modeled
 - What real world task is being modelled; what real world problem(s) will be addressed; who, besides researchers, cares about this problem?
 - What is expected to be learned?
 - What valuable infrastructure would be created if the task were run?.
2. Describe the system task in terms of inputs and outputs
3. Define the evaluation procedure and measure(s)
 - Where would assessing/annotation occur (NIST? elsewhere?).
 - Are there are any special qualifications or domain expertise required of the assessors/annotators?
 - How much effort would such annotation/assessing require?
4. Identify development and evaluation data
 - type
 - quantity
 - availability

Map: NIST Admin. Building, 1st Floor



**Bus to/from the
Holiday Inn**

Reminders

- If you are driving to NIST rather than taking the NIST bus, you don't need to stop at the Visitor Center tomorrow.
 - Just show you conference badge and photo ID at the gate as you drive in.
 - Wear your badge at all times while at NIST; stay in the public areas
- Lunch will be in the NIST West Square Cafeteria (except Fri.)
 - Your ticket (from your badge holder) will be collected as you enter the cafeteria
 - Choose whatever you want from the buffet and proceed to a table
- If you indicated that you have special dietary requirements on the TRECVID registration form, please see an attendant at the registration desk before going to the prepared workshop lunch.
- The workshop supper is at Growlers Brew Pub in Gaithersburg. This is a casual restaurant. Check the agenda for the bus schedule.
 - One ticket is included with your registration
 - You can buy additional tickets at the registration desk
 - If you don't plan to attend, please turn in your ticket at the registration desk so someone else can use it to attend.
 - Driving instructions to Growlers are available at the registration desk.

Reminders

- If you are giving a talk, please have your computer connected or presentation loaded **BEFORE** the session begins
- Poster supplies are available at the registration desk. Posters go up anywhere on the numbered poster wall (see map). We'll remove posters at noon on Fri. if you have not already done so.
- Wireless access info is in your badge holder. Do not share your password. The registration desk has instructions.
- If you make cab/shuttle arrangements to be picked up from NIST, please be aware that cabs/shuttles will no longer be allowed past the NIST main gate. Please allow 10 minutes to walk to the NIST main gate to meet your cab/shuttle.
- If the registration desk is not staffed, there is a phone there with a number to call for help.