TREC Video Retrieval Evaluation
TRECVID 2011

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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.
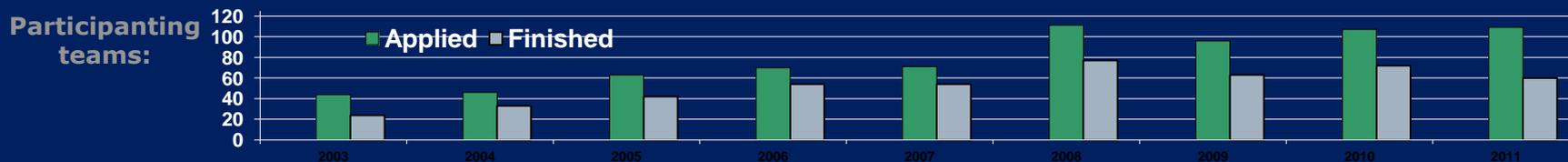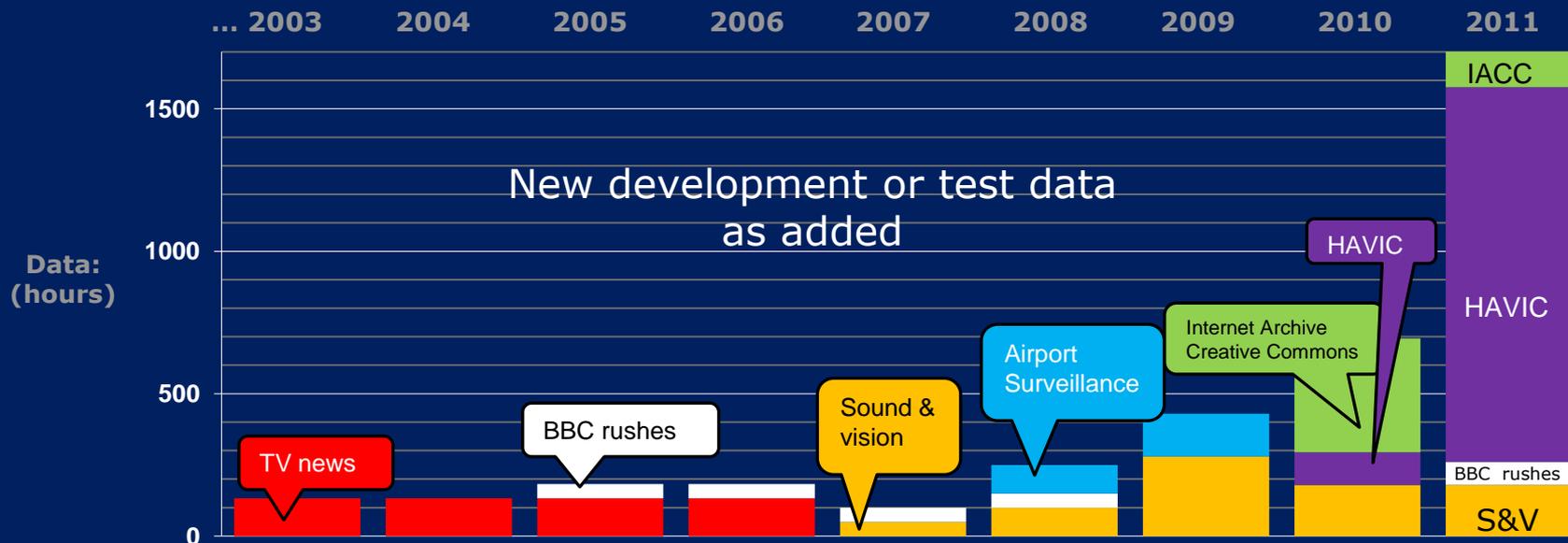
Focus: content-based approaches

- 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

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TRECVID's Evolution

TRECVID 2011 Tasks and Data

Internet Archive – Creative Commons (IACC)	BBC Rushes	Airport surveillance	HAVIC - Internet multimedia
200 hours test data, video, title, keywords, description	20,982 test video clips	50 hours, test video	991 hours, test video
400 hours dev video, metadata		100 hours, dev video	438 hours, dev video
Known-item search (381 text-only test queries)	**Instance search pilot** (25 image test queries)	**Surveillance event detection** (7 test events, choose 3)	**Multimedia event detection** (10 complex test events)
Semantic indexing (346 concepts, auto-assigned, submitted; 50 evaluated)			
Content-based copy detection (11,256 audiovisual test queries)			

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PicSOM             --- --- KIS --- --- SIN   Aalto University
AXES-DCU           --- INS KIS *** --- ***   Access to Audiovisual Archives
ATTLabs            CCD INS --- --- --- ---   AT&T Labs Research
BBN-VISER          --- --- --- MED --- ---   BBN, UMD, Columbia, UCF team
BJTU_SED           --- --- --- --- SED ---   Beijing Jiaotong University
BJTU_SIN           --- --- --- --- --- SIN   Beijing Jiaotong University
BUPT-MCPRL         CCD INS KIS --- SED SIN   Beijing University of Posts and Telecommunications-MCPRL
brno               CCD --- --- *** *** SIN   Brno University of Technology
CMU-Informedia     --- *** *** MED SED SIN   Carnegie Mellon University
ITI-CERTH          --- --- KIS MED --- SIN   Centre for Research and Technology Hellas
ADDLIV21CM         --- --- --- MED --- ---   Charles Stark Draper Laboratory, Inc.
IRDS-CASIA         --- --- --- --- SED ---   Chinese Academy of Sciences
VIREO              --- INS KIS MED --- SIN   City University of Hong Kong
CRIM-VISI          CCD --- --- --- SED ---   Computer Research Institute of Montreal
DCU-iAD-CLARITY    --- --- KIS MED --- SIN   Dublin City University
FIU-UM             --- INS --- --- --- SIN   Florida International University
FTRDBJ             CCD --- --- --- --- SIN   France Telecom Orange Labs (Beijing)
IBM                *** --- --- MED --- ***   IBM T. J. Watson Research Center
INRIA-LEAR         CCD --- *** MED *** ***   INRIA-LEAR
INRIA-TEXMEX       CCD *** --- --- --- ---   INRIA/IRISA
ARTEMIS-Ubimedia   --- INS --- --- --- ---   Institut TELECOM SudParis, Alcatel-Lucent Bell Labs France
VideoSense         --- --- --- --- --- SIN   Institut Eurecom
CAUVIS-IME-USP     --- INS *** --- --- ---   Instituto de Matematica e Estatistica - USP
IMG@THU-FRDC-FLAB  *** *** *** *** *** SIN   Tsinghua University, Fujitsu
ITU_MSPR           CCD --- --- --- --- ---   Istanbul Technical University
JRS-VUT            --- INS --- *** --- SIN   JOANNEUM RESEARCH and Vienna University of Technology
KBVR               --- --- KIS --- --- ---   KB Video Retrieval
KDDILabs           CCD *** --- --- --- ---   KDDILabs
GENIE              --- --- --- MED --- ---   Kitware Inc.
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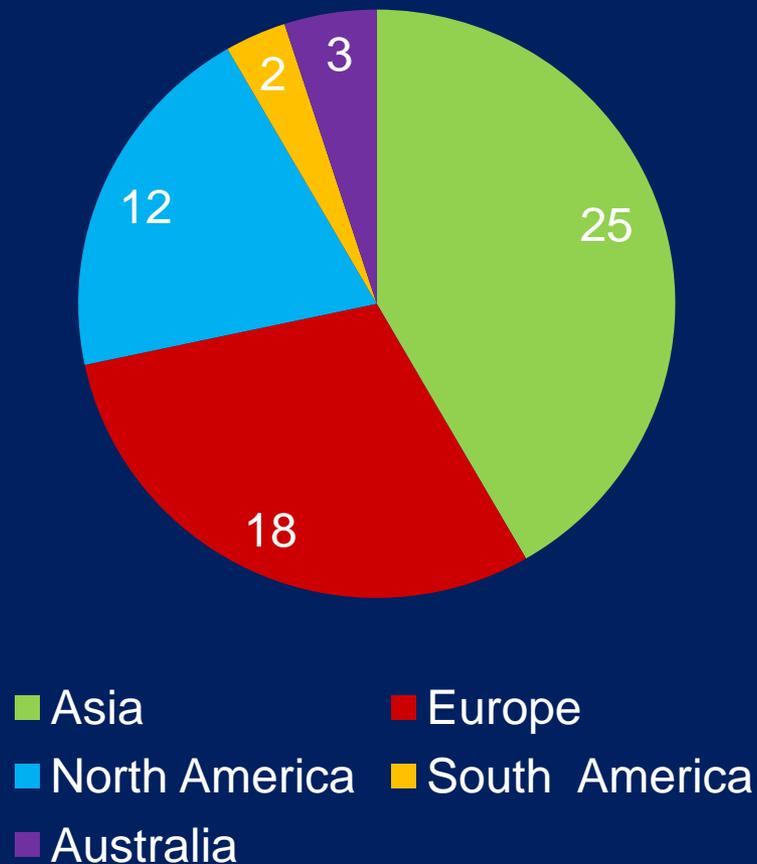
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cs24_kobe          --- --- *** MED --- SIN    Kobe University
IRIM               *** INS *** *** *** SIN    Laboratoire d'Informatique de Grenoble
KSLab-NUT          --- *** KIS --- --- ---    Nagaoka University of Technology in Japan
NII                *** INS *** MED *** SIN    National Institute of Informatics
TNO                --- INS --- --- --- ---    Netherlands Org. for Applied Scientific Research
NHKSTRL            *** *** *** *** SED SIN    NHK Science and Technical Research Laboratories
Nikon              --- --- --- MED --- ***    Nikon Corporation
NTT-CSL            CCD --- --- --- --- ---    NTT Communication Science Laboratories-CSL
NTT-NII            --- INS --- --- --- ---    NTT Communication Science Laboratories-NII
NTT-SL-ZJU         --- --- --- --- --- SIN    NTT Cyber Solutions Lab.
IMP                CCD *** --- --- --- ---    Osaka Prefecture University
PKU-IDM            CCD --- --- --- SED ---    Peking University-IDM
PRISMA             CCD --- --- --- --- ---    PRISMA-University of Chile
Quaero             --- *** --- MED --- SIN    Quaero consortium
RMIT               CCD --- --- --- --- ---    RMIT University School of CS&IT
SCUC               --- *** KIS --- --- ---    Sichuan University of China
Aurora             *** *** *** MED *** ***    SRI International Sarnoff Aurora
SESAME             --- --- --- MED --- ---    SRI International - SESAME
SYSU-GITL          CCD --- --- --- *** ---    Sun Yat-sen University - GITL
Telefonica.research CCD --- --- --- --- ---   Telefonica Research
ANU                --- *** *** MED --- ***    The Australian National University
tokushima_U        CCD INS --- --- --- ---    Tokushima University
TokyoTech+Canon    --- --- --- MED SED SIN    Tokyo Institute of Technology, Canon Corp.
iupr-dfki          CCD --- --- --- --- SIN    University of Kaiserslautern
marburg            *** *** --- *** --- SIN    University of Marburg
MediaMill          --- *** *** MED --- SIN    University of Amsterdam
UEC                --- *** *** MED --- SIN    University of Electro-Communications
UQMSG              CCD --- --- --- --- SIN    University of Queensland
USC-UTSA           CCD *** --- --- --- ***    USC Viterbi School of Engineering
XJTU               CCD *** *** *** *** ***    Xi'an Jiaotong University
ZJU_CS_IV          CCD *** --- --- *** ---    Zhejiang University
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Unique finishing teams

Groups Finished	Task code	Task name
22	CCD	Copy detection
8	SED	Surveillance event detection
28	SIN	Semantic indexing
9	KIS	Known-item search
19	MED	Multimedia event detection
13	INS	Instance search pilot

Pie chart — Unique finishing teams:
- Asia: 25
- Europe: 18
- North America: 12
- South America: 2
- Australia: 3

Legend:
- ■ Asia
- ■ Europe
- ■ North America
- ■ South America
- ■ Australia

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Support

The running of TRECVID 2011 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.

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Additional resources and contributions

- Georges Quénot with Franck Thollard, Andy Tseng, Bahjat Safadi from LIG and Stéphane Ayache from LIF
  - shared coordination of the semantic indexing task
  - provided the master shot reference for the IACC.1.B video
  - organized judging of 30 concepts with support from the Quaero program

- Georges Quénot and Stéphane Ayache again organized a collaborative annotation – this time of 346 features by the community

- Alan Smeaton and Brian Boyle at DCU arranged for the mirroring of the video data

- Kevin McGuinness (DCU) ran the oracle at DCU for interactive systems in the known-item search task.

- The LIMSI Spoken Language Processing Group and VexSys Research provided ASR for the IACC.1.B videos

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Agenda: Day 1

❑ Arranged by task

❑ Time for discussion of approaches & evaluation

❑ Monday

    ❑ Intros, thanks, etc.

    ❑ Multimedia event detection

    ❑ Known-item search

    ❑ Lunch

    ❑ Known-item search (conclusion)

    ❑ Semantic Indexing

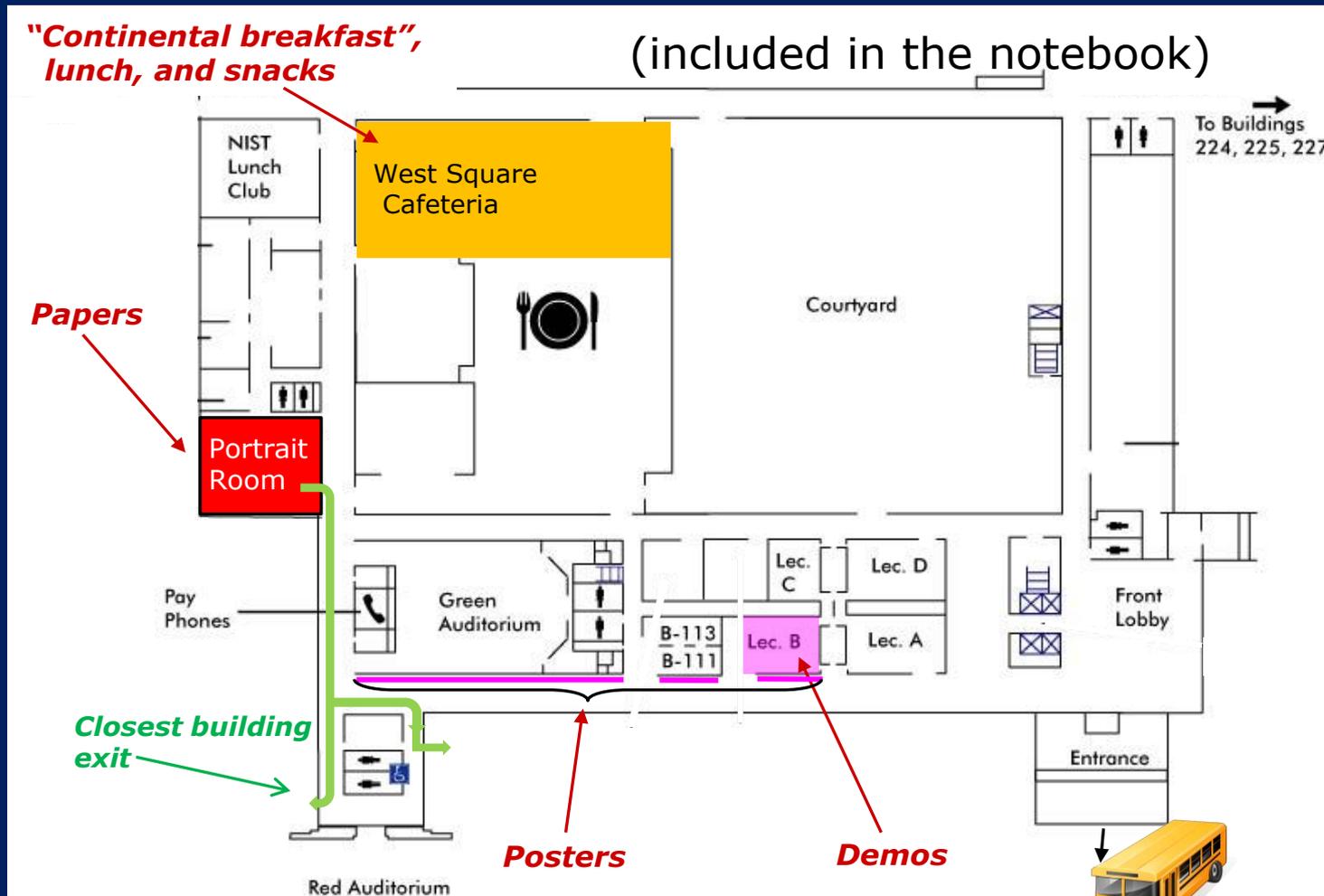   ❑ Workshop dinner

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Agenda: Day 2

- ❑ **Tuesday**
    - ❑ Instance search
    - ❑ Surveillance event detection
    - ❑ Lunch
    - ❑ Surveillance event detection (conclusion)
    - ❑ Poster/demo boaster
    - ❑ Posters and demos

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Agenda: Day 3

- ❑ Wednesday
  - ❑ Copy detection
  - ❑ TRECVID planning
  - ❑ Workshop close
  - ❑ Lunch

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Map: NIST Admin. Building, 1ˢᵗ Floor

"Continental breakfast", lunch, and snacks

(included in the notebook)

NIST Lunch Club

West Square Cafeteria

Courtyard

To Buildings 224, 225, 227

Papers

Portrait Room

Pay Phones

Green Auditorium

Lec. C

Lec. D

B-113 B-111

Lec. B

Lec. A

Front Lobby

Closest building exit

Posters

Demos

Entrance

Red Auditorium

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 Wed.)
  - ❏ 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

- ❏ Participants who requested vegetarian meals
  - ❏ should go through the buffet in the MAIN end of the cafeteria and present their ticket to the cashier.

- ❏ The workshop supper is at Growlers 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 restaurant are available at the registration desk.

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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 Wed. 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 want to be picked up by a taxi or shuttle, you must let the registration desk know the name of the company at least 2 hours before the pick-up time.

- If the registration desk is not staffed, there is a phone there with a number to call for help.

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