

Sixth and Final Six-Monthly Meeting

INDUSTRIAL LIAISON

***Frankfurt Airport Conference Centre
Friday 11th February 2005***

Aims and outcomes in TA4

- **Aims:**
 - to identify application drivers, highlight successes, and promote research trials, in all types of industries
- **Formal deliverables**
- **4 Successful specific actions**
 - SA7.1 White paper industrial applications
 - SA7.2 application prize identified and awarded
 - SA7.3 project liaison
 - SA7.4 IST conference: exhibition and networking session

Formal deliverables in TA4

- Database of research profiles TA4.1.n
 - List of active computer vision groups compiled KTH, Sweden
- Database of vendors TA4.2.6
 - **Delivered**
- Database of applicn motivated problems TA4.3.6
 - **Partly delivered**
- List of techniques useful/not TA4.4.6
 - Deferred
- Application prize (SA 7.2) TA4.5.n
 - **Delivered**

Database of vision vendors TA4.2.6

- **Objectives**

- Directory of vision vendors, indexed by application, product type, deployed technology, industrial sector.

- **Methodology**

- Examined 100+ vision companies
- Analysed brochures, magazines, websites, etc
- Carried out a survey

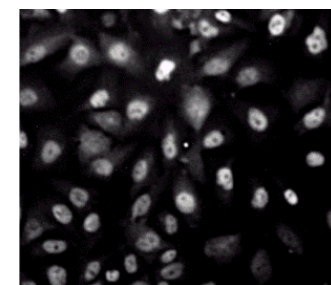
- **Criteria used:**

- cite cognitive vision technology
- learning, reasoning about events and structures, recognition and categorisation, goal specification, knowledge representation

- **Outcome: 17 full entries into database**

SA7.1 White Paper on industrial applications (1)

- 8 Industrial participants
 - life science, surveillance
 - aerospace, robotics
 - industrial inspection
 - photo libraries (LAVA)
 - media and entertainment (DETECT)
- 10 man days/€12k4
- Final version on website



SA7.1 White Paper on industrial applications (2)

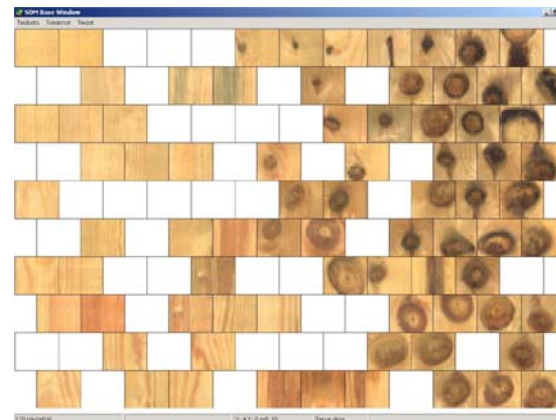
- Additional technical challenges identified
 - User Interface
 - human expert
 - visualisation, multi dimensional
 - Vocabulary, ontology
 - databases
 - People detection
 - e.g. TV, robotics (interacting safely), surveillance
 - System design process
 - life cycle, specification, installation, etc.
 - Architecture
 - Modular design
 - Off the shelf components (COTS)
- B2B decision processes vs B2C
 - More rational, less cost sensitive
 - ease of use and reliability requirements

TA7.2 Cognitive Vision Application Prize

- Main Objective
 - Identification of successful uses of the technology
- Secondary goals
 - Raise profile for the network & cognitive vision
- Approach
 - Prize for best Application Development in Cognitive Vision Systems
 - promoted in co-operation with trade press, conferences

⇒ winner was **inX systems**

- Awarded at ECCV Prague 5/04
- Presentation at workshop
- 10 man days/€7k9
- Press obtained:
 - Puumies (SF), Holz Kurier (Au), local papers, customer meetings



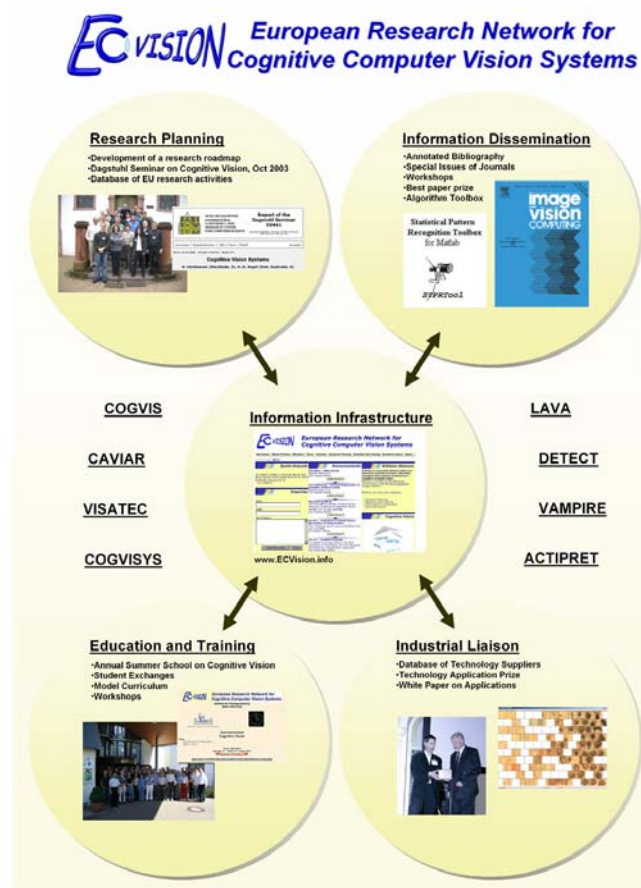
TA7.3 project liaison: objectives and outcomes

- Promote the use of the cognitive vision technology
 - Using the Technology Adoption Life Cycle
- Promote use of materials already developed
- Assist in project dissemination
- Develop new actions -> led to TA7.4

- Methodology workshop in Nice with EUTIST
- Meeting with LAVA project: Jan 04
- Participation in VAMPIRE workshop: July 04
- Meeting with CAVIAR project: Sept 04
- Budget 22 man days/€21k

SA 7.4 IST Conference

- Goals of the action
 - participation at the IST Conference
 - The Hague, 15th - 17th November 2004
 - promote ECVision activities and cognitive vision projects
 - run exhibition stand
 - networking session
- 20 man days/€13k



SA 7.4 IST Conference

- Exhibition stall
 - Presentation of the ECVision activities:
 - presentation of the ECVision Roadmap
 - White Paper on industrial applications
 - Presentation/demo of 3 affiliated projects:
 - ACTIPRET: Christof Eberst, Profactor
 - VISATEC:
University Kiel
and Linkoeping
 - DETECT/CAVIAR: Jim Crowley
- Outcome / Observations
 - interest in ECVision Roadmap
 - contacts to researchers from
the new EU member states



SA 7.4 IST Conference Networking Sessions on Cognitive systems and Cognitive Vision

- **Programme**
 - Introduction to Cognitive Vision
 - Example of progress to date
 - Roadmapping cognitive vision
 - Potential applications
 - Technology take-up mechanisms
 - Panel session to key questions
- **Promotion**
 - 400 flyers printed 330 distributed
- **Outcome**
 - 44 persons registered, more in room
- **Demonstration**
 - cognitive learning device, Uni Leeds, Cohn



Remarks on applications

Current applications in projects

- FP5
 - Manufacturing/support [Visatec, Actipret, Vampire]
 - Surveillance [Caviar]
 - Entertainment [Detect]
 - Mobile assistant [Cogsys, Vampire]
 - Stock photo/mobile assistant [Lava, Vampire]
- FP6
 - Co-operative construction [Jast]
 - Surveillance outdoor [Gnosys]

 - Mobile (domestic) assistants [Cosy, Spark, Macs]
 - Testbed [Robotcub, Cospal, Mindraces]

Applications categories

- Consumer
 - Easy to understand but market uncertainty
- Business/professional
 - High value, quantifiable, short term
- DARPA/public authority
 - National security: (stable ?)
 - Cognitive systems **"...could make major differences in the operation of our military, the functioning of our government, and the productivity of our daily lives."** [Brachman DARPA IPTO IEEE IS nov/dec 2002]
- General public: not currently addressed...