



# Some HCI Projects at NRC/IIT

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CapCHI: Dec. 4 2003

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## Intro to NRC



- National Research Council of Canada
- Recognized globally for research and innovation, NRC is a leader in the development of an innovative, knowledge-based economy for Canada through science and technology.
- research institutes: biotech, astrophysics, materials, aerospace, biology, chemistry, ocean tech, construction, nanotech ...

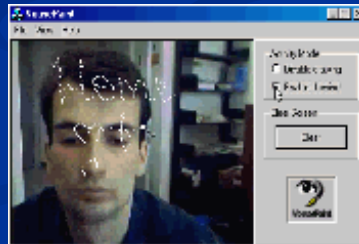


**SCIENCE**  
at work for **Canada**

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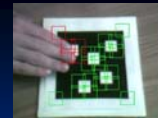
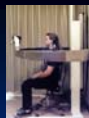
# Institute for Information Technology (IIT)

- NRC-IIT conducts scientific research, develops technology, creates knowledge and supports innovation with the aim of having a *beneficial and profound impact on Canadian society*. NRC-IIT blends the long-term vision inherent in leading-edge science with a capacity to adapt to emerging S&T issues and priorities.
- Ottawa, Gatineau, Fredericton, Moncton, Saint John, Sydney



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## HCI in IIT



- IIT researchers organized into “groups” by domains of research

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>■ 3D Technologies</li> <li>■ Artificial Intelligence Technologies</li> <li>■ Broadband Visual Comm.</li> <li>■ Computational Video</li> <li>■ e-Government</li> <li>■ e-Health</li> <li>■ e-Learning</li> </ul> | <ul style="list-style-type: none"> <li>■ High Performance Computing</li> <li>■ Human Web</li> <li>■ Information Analysis &amp; Retrieval</li> <li>■ Interactive Language Technologies</li> <li>■ Internet Logic</li> <li>■ Security and Privacy</li> <li>■ Software Engineering</li> <li>■ Wireless Systems</li> </ul> |
|--|--|

- HCI (like) researchers work in some (most) groups
- horizontal HCI organization for meetings, knowledge sharing, socializing

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# IIT Projects

- drivers for projects:
  - group themes
  - top-down directions & opportunities
  - bottom-up initiatives



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## Example 1: PISA



- Privacy Incorporated Software Agents
- top-down theme opportunity: contacted by Canadian Consulate in The Netherlands
- EU Fifth Framework projects were being judged on non-EU participation -- were we interested
  - topic was privacy-enhancing technologies
    - high-profile partners in Netherlands, Belgium, Italy
- international involvement and exposure
- interest and relevance to Canadian companies
- 2001-2003: EU 1.7 million 50% funding
  - non for non-EU participants
- NRC portion self-funded



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## Example 2: ACE

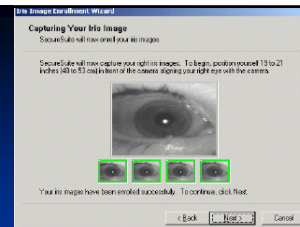
### ■ Advanced Collaborative Environments

- top-down: NRC President interested in work being done at New Media Innovation Centre (NewMIC) in Vancouver, willing to fund collaboration
- meetings, correspondence to find topics of interest
- definition of project across IIT groups based on “Quality of Experience” during collaboration sessions
- Communications Research Centre (CRC) added as partner because of similar interests
- project description and plan approved ( 3 years)
- funding: NRC President’s Fund for NewMIC and IIT; CRC self-funded

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## Example 3: Biometrics

- group theme of “security & privacy”
- PISA = privacy, so what about security
- bottom-up initiative to identify issues and opportunities
- organized CHI2003 workshop on “HCI and Security Systems”
- “usability and acceptability of biometric security systems” – important, current issue, little research, “classic” HCI opportunity
- funding: self-funded from group account
- time frame: indefinite
- initial heuristic analysis of biometric devices & services



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