Promoting Information and Community Awareness through Opportunistic Interfaces

Q. Alex Zhao* & John Stasko
Information Interfaces Research Group
GVU Center, College of Computing
Georgia Institute of Technology

*Now at Intel Corporation
Community Awareness

- Knowledge about one’s own community:
  - Helps build and sustain social ties
  - Eases information sharing
  - Facilitates the collaboration in creative work
Problem

- Large communities
- Geographic separation

“I feel that the College is no longer a real community. Instead, we’re turning into fiefs and isolated research groups that barely encounter each other.”

- Increasing amount of information vs. limited amount of attention
Research Focus

- Identify communication mechanisms for promoting community awareness
- Design and implement opportunistic information-interfaces for supplementing community communication
- Evaluate the use and effectiveness of opportunistic information-interfaces
Opportunistic Information-Interfaces

- By chance
  - Presentation
  - Access

- "Push" vs. "pull"

- Where to push?
  - Computer desktops
  - Personal displays
  - Public displays
  - Ambient displays
Design Goals

- Provide useful and interesting content
- Encourage open, public, cross-group communication
- Complement existing communication methods
- Have a simple and calm interface
1. Community Communication Bar

- Small, corner of the display window
- Cycles through information blurbs, items of interest to people in community
  - Automatically posted
    - Announcements, birthdays, news, ...
  - User-posted
    - Join for lunch, questions, ...

Communication-bar Close-up

Blurb image
New blurb flag
Title & web link

Bring up menu
Post a blurb
Go to previous/next
Hide blurb
Chat activity
Summary

 Kommunications-bar Close-up

Blau Bild
Neuer Blurb-Flag
Titel & Web-Link

Bringen Sie das Menü hoch
Posten eines Blurs
Zum vorherigen/next springen
Verbergen des Blurs
Chat-Aktivität
Zusammenfassung

Communication-bar Close-up

Blurb image
New blurb flag
Title & web link

Bring up menu
Post a blurb
Go to previous/next
Hide blurb
Chat activity
Summary
Blurb Images

• Conveying topic

• Conveying source of information

• Conveying status
Posting and Customization

- Prominent “Post” button on main window
- Simple dialog input
Design Evolution: Appearance

Slate Takes on Linux
alkali writes "The weekend edition of the Microsoft-owned, Michael-Kinsley-edited Slate has two articles on Linux, one written by Slate’s chief program manager (i.e., a techie) and the other written

What’s Happening in CoC?

Workscape of the Future: Is It Real or Is It Cyber?
Tom Moran, Xerox PARC
In 15 minutes (MiRC 102)
The office of the future will not be a virtual, electronic, paperless world. Real work will continue to occur in physical

Distance Matters
GVU Distinguished Lecture Series: Gary & Judith Olson, University of Michigan. Contact: stewart@cc.gatech.edu
12:00–1:00pm MiRC Rm 102

CoC Welcome Reception
3:00–4:00pm
CCB Lower Courtyard
2. Community Screen-Saver

- Collage server
  - Crawls local web sites for images
  - Continuously generates random collages from images found

- Screen-saver clients
  - Check a JPEG file @ fixed URL to see if new collage is available
  - Retrieve and display new collage
Re-Tiling Polygonal Surfaces

http://www.cc.gatech.edu/gvu/people/faculty/greg.turk/retile/retile.html
Developing a 3D Model of a Blood Vessel

Figure 3: Typical cross section showing branching of blood vessels. The red arrow identifies a tertiary blood vessel, these vessels...
A Spanish Ramble

Tom’s Home Page

http://www.cc.gatech.edu/~john.stasko/tom
Value-added Collages
Want To Playtest An Xbox?

drix writes: "Microsoft is recruiting people to playtest the Xbox!"
Someone over there has got to be reading! Let me have a crack at one
guys! (Course, if they don't the conspiracy theorists will know why:
and don't say, "Rob Doesn't Live in Seattle" cuz that's too easy.
Course who am I kidding: The Microsoft conspirators are too busy saying
the xbox will the crappiest system ever without ever touching one. I
just see it as Microsoft's way of saying, "We're not a monopoly.
Promise!" as they attempt to swallow another industry. The system may
very well rock).
Collage Generation Process

• Web crawler records images found on local web sites
  
  \[ \text{http:.../page.htm} \rightarrow \text{http:.../image.gif} \]
  
  (47K image references on 10K web pages)

• Collage server
  
  – Builds a randomized list of web pages
  
  – For each page on the list, generates a collage from images on that page
Creating a Collage for a Web Page

• Select up to 10 items from image set
  – Ignore thin/tall/small images
  – If < 5 images, draw first few lines of text in background layer

• Paint selected images

• Annotate collage with title and URL text
Grid Image Layout

wiggle

http://www.cc.gatech.edu/~junxiao/album.htm
Evaluation

• Perhaps another time...

Both systems in use for over 3 years now
Future Opportunities

• More user-customizable clients for peripheral information awareness
  – Other web sites in screen saver
  – Combine with Information Art-like approaches
For More Information

- www.cc.gatech.edu/gvu/ii/community
- stasko@cc.gatech.edu

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