Games-to-Teach Project Adds Spark to Learning
• Lee Ridgway

Video games! Around for about 40 years, they evolved from simple ping-pong matches played by programmers on mainframes, to complex games of skill played on hand-held devices — and mastered by ever-younger children. Regarded as entertaining diversions by most people, or seen by critics as a threat to civilization, video games are now part of most young people’s lives — at least in countries where modern technology is readily available.

As with other entertainment media — such as television and movies — the maturing of video games is bringing consideration of new applications, especially for educational purposes. Which brings us to the Games-to-Teach Project in MIT’s Comparative Media Studies (CMS) program. Games-to-Teach began two years ago as an iCampus project between MIT and Microsoft Corporation, with a goal of developing sophisticated video games in math, science, engineering, and the humanities.

The project is under the joint direction of Henry Jenkins, Director of MIT’s Comparative Media Studies, and Randy Hinrichs, Group Research manager for Learning, Science, and Technology within Microsoft Research. They lead an interdisciplinary team of faculty, staff, and students, with Kurt Squire as the research manager.

In its first year, Games-to-Teach researchers conceived ten ideas, or conceptual frameworks, for games ranging from physics, to mechanical and architectural engineering, to environmental and biological sciences. More recently, Games-to-Teach is exploring projects in the humanities related to history, language learning, cultural studies, and psychology. Each concept addresses a subject at the advanced-placement level, based on pedagogical models such as learning by participation, by design, and by play. The concepts draw from several different game genres, such as action, simulation, role playing, and adventure. This past year, Games-to-Teach developed two prototypes which are being tested in MIT courses. The development teams were led by CMS graduate students Philip Tan and Walter Holland.

Electromagnetism

In introductory physics, one of the most difficult concepts to teach, and for students to grasp, is the interaction of electromagnetic forces with charged particles (grossly simplified, how changes in electrical or magnetic fields lead to changes in the motion and energy of particles such as electrons and protons). It’s an abstract topic with few real-life analogies. Physics teachers have long recognized the problem in trying to get these abstractions across, and attempts to aid their teaching have included such things as virtual-reality headsets, simulations, and animations.
Enter Supercharged! – an interactive, action racing game, designed to give its players an intuitive understanding of electromagnetic reactions. It is based on the latest 3D gaming technology, which lets developers create an immersive experience on a PC or similar device.

Supercharged! developers worked closely with Professor of Physics John Belcher, whose interest in the project is more than passing: he teaches 8.02, the introductory physics course on electromagnetism and electrostatics. In fact, Supercharged! will be tested in this spring’s 8.02, as part of Belcher’s innovative use of the TEAL classroom.

Essentially, Supercharged! is an intellectual toy which its creators hope a theoretical physicist would love. As with any good action video game, Supercharged! puts you in a fantasy, in this case a surrealistic world of electric space, magnetic fields, lines of charge, and a space ship that acts like a charged particle. It even includes an evil professor of physics. Set up with different levels and goals, the ultimate aim is to escape back into the “real” world, using the game’s tools and the player’s ingenuity in exploring electromagnetism.

The educational value of a game like Supercharged! presupposes a close link with classroom teaching and a textbook. The idea is that, through the game, students will begin to translate the difficult, theoretical aspects of electromagnetism into a qualitative understanding of how charged particles act.

Environmental Detectives
Environmental Detectives is an augmented-reality simulation for investigating environmental issues, especially those around toxic spills. Its platform is a hand-held PDA, and to simulate operation in the field, it integrates wireless, Global Positioning System (GPS), and Bluetooth technologies. MIT Assistant Professor Eric Klopfer has collaborated in the development of Environmental Detectives and is helping Games-to-Teach research its effectiveness in classrooms. A key feature of Environmental Detectives is its set of authoring tools, enabling teachers and students to create simulations better suited to local situations and curricular constraints.

For example, in a class on chemicals in the environment, the students are divided into groups representing government environmental agencies, health officials, company workers, company executives, or environmental activists. On launching their PDAs, the students are given a cover story, tailored to their respective role, which is built around the premise of pollution of the local watershed by mercuric chloride, a hazardous material used in various energy, manufacturing, and health-care processes.

What looks like a complex game of “good guys vs. bad guys” is designed to develop investigative skills that are part of the environmental education curriculum: observation, testing of hypotheses, and data gathering, analysis, and reporting. MIT professors Heidi Nepf and Trish Culligan helped design Environmental Detectives, giving input on how such studies are conducted and on toxicology. An offshoot of the game is that students also learn about chemicals and their effects in the environment.

Environmental Detectives was tested this past fall in MIT’s Terrascope, a program for freshmen to explore engineering and science concepts through studying the planet Earth.

Visions
Video games can simulate complex phenomena, engage players through stories, express ideas creatively, and encourage collaboration with others. The vision of the Games-to-Teach Project is to harness this technology into games that enhance solid learning.

To learn more, visit the Games-to-Teach web site at http://cms.mit.edu/games/education/
Dreamweaver MX Combines Sophistication and Utility

Tim Griffin and Janet Littell

Dreamweaver MX, from Macromedia, is MIT's supported HTML editing and web page creation software. MX provides sophisticated features for web publishing, while remaining useful for basic web page design.

Dreamweaver MX 6.0 was released last year. In January, Macromedia issued the 6.1 Updater, which includes bug fixes and integration with Contribute, Macromedia's new Windows-only application for web site maintenance. (The Macintosh version is due out later this year.) Given the importance of the bug fixes, Macromedia is encouraging MX 6.0 users to update to 6.1, even if they don't plan to use Contribute.

New User Interface Features

The MX “paneled” workspace is highly customizable. The new Insert panel holds many tabs that contain commands, tags, and extensions previously accessible only from menus. For Windows users, all panels and documents are now enclosed within the Dreamweaver design space instead of floating over the desktop. Windows users can switch back to the Dreamweaver 4 floating panel interface by changing the setting under General Preferences > Change Workspace. The Sites window is now collapsible and can be docked with other panels.

Cascading Style Sheets

Cascading Style Sheets (CSS) code in MX is now W3C compliant and easy to insert. While the Design view renders CSS more accurately than before, you should make frequent use of the Browser Preview function for cross-browser and cross-platform support.

On the CSS Styles tab in the Design panel, you’ll find the Apply Styles and Edit Styles buttons. The Edit Styles button provides access to all styles, linked and embedded, and the properties of each. Double-click on a style to open the CSS Style Definition dialog and edit the style.

You can now access CSS styles that are applied to text from both the CSS Styles tab in the Design panel and in the Properties panel. This feature in the Properties panel lets you toggle between viewing your HTML text style properties and viewing CSS custom class styles. The custom class styles appear in a drop-down menu with their properties listed to the right. From this same drop-down menu, you can edit or add a style, and link to an external style sheet.

Dreamweaver Templates

Dreamweaver MX supports many new template functions. Designers who create templates can now nest them – that is, put templates inside templates. Nesting templates allows designers to preserve the integrity of a page’s design while letting template users customize specific features. For example, you can specify a parent template with a consistent footer and organization logo, and a nested child template that defines a unique section look.

The Editable Attributes and Editable Regions features let template users adjust even more specific aspects of a page without changing the overall design. For example, template designers can let users modify a table’s background color by setting the bgcolor attribute of the table to be editable.

The new Check Template Syntax command, located on the Modify > Templates menu, is a handy tool for validating your template code.

Accessibility Tools

Dreamweaver MX has a set of accessibility checker preferences for use with basic web pages, forms, frames, media, images, and tables. When activated, the checker prompts you to add Section 508 compliant code as you create or edit a web page. The command, Check page for accessibility, now built into MX, validates your page for accessibility and lists potential problems.

Users of Windows screen readers, users with RSI, and others who prefer keyboard shortcuts have new navigation options in MX. One is moving back and forth through the Design, Code, Application, Files, and Answers panels using Control-Alt-Tab or Control-Alt-Tab-Shift. A faint outline appears at the edges of the selected panel. Another option is using the spacebar to minimize and expand a selected panel. If a panel has multiple options, you can use the arrow keys to move through them.

Unfortunately, support for screen reader technology – JAWS and Window Eyes – is still limited.

Secure File Transfer

Non-secure connections to the main MIT FTP servers are prohibited. Dreamweaver’s internal file transfer utility uses an insecure version of the Internet file transfer protocol (FTP), so you can no longer transfer files to the main MIT web servers using only this Dreamweaver function – your username and password would be sent unprotected, fully visible to hackers. This is an unacceptable security risk to you and the MIT community.

IS now supports secure file transfers using Dreamweaver in combination with helper software that encrypts usernames, passwords, and data being transferred. For information on this process and other options for secure file transfer, see the IS Dreamweaver web page at

http://web.mit.edu/is/help/dreamweaver/

Support for Dreamweaver MX

Dreamweaver MX has several new features that IS supports – as well as a few features that IS does not support. For details, see the IS Dreamweaver web page (URL above). For help with features not supported by IS, consult the Macromedia Dreamweaver Support Center at

http://www.macromedia.com/support/dreamweaver/

Dreamweaver’s built-in help is also extensive. If you have questions that these resources cannot answer, send e-mail to the IS Computing Help Desk at <computing-help@mit.edu> for directions to other possible resources.

IS offers training on Dreamweaver, web publishing, and accessibility. To find out more about Quick Starts and hands-on classes, see the Training section of the IS Dreamweaver web page.

http://web.mit.edu/is/isnews/
SpamAssassin Takes a Swipe at Junk E-Mail

• Jonathan Hunt

What can you do about spam, that unsolicited, unwanted junk e-mail that keeps appearing in your inbox? Up until now your options have been limited. You could try to filter key phrases like “toner cartridge.” You could buy software that claims to prevent spam, but only works a little. Or you could live with the most common solution, just deleting spam and moving on. As the volume of spam has increased, so has the frustration and the time lost dealing with it. IS has recently added some features to the MIT mail system to help you deal with spam.

SpamAssassin to the Rescue

IS is pleased to announce the installation of SpamAssassin on the MIT mail servers. The web site for this open source program is at http://spamassassin.org/

SpamAssassin performs a series of tests on e-mail messages and issues a score based on how likely they are to be spam. The higher the score, the more likely that a message is spam. The score and a YES/no flag are added to each message’s header.

You may have noticed several new mail headers in your e-mail relating to spam recently, specifically:

X-Spam-Flag: NO
X-Spam-Score: 4.5, Required 7.5

You can find more information on these and other new headers from the MIT Spam Screening web site at http://web.mit.edu/ia/is/help/nospam/

How Do You Filter Spam?

Your options depend on the e-mail client you use. With POP clients, you can set up a filter so that messages with the X-Spam-Flag header set as YES are moved to another mailbox. With IMAP clients, you can configure your mailbox so that the server delivers all e-mail flagged as spam to a sub-mailbox under your Inbox. You can further configure your spam settings so that e-mail in that sub-mailbox is purged after some period of time. The default setting is to not purge the mailbox, so be careful about your quota: spam can use it up very quickly.

Separating spam from legitimate e-mail is a difficult and ever-changing problem. The solution that MIT has implemented may not be sufficient in the future, so expect that the system will need to change over time. Also because spam filtering is hard, some legitimate messages will be scored as spam. IS recommends that if you choose to filter spam, you should scan through all the spam-flagged messages regularly for at least the first 6 to 8 weeks to be sure that any e-mail you want does not end up lost with all the spam.

One of the most common message types that is incorrectly flagged as spam is subscription newsletters such as airline special fare e-mails and security announcements. To prevent these messages from being flagged as spam, you can customize your Allow list in your spam settings to not flag messages from a particular address as spam. You can also customize your personal spam threshold, the score above which messages are flagged as spam. All of your personal spam settings can be customized.

The Contents Are Untouched

Rest assured that the contents of your e-mail are not being changed, filtered, or blocked. All e-mail sent to you at MIT will be delivered to you. If you do nothing, the only change will be the added headers in your e-mail. You must choose to make a filter in your e-mail client or create a specific IMAP mailbox for any filtering to happen. If you choose the IMAP filter solution, you’ll also need to choose to have that mailbox periodically purged of older messages or delete the messages yourself.

Information and Help

The MIT Spam Screening web site, mentioned earlier, is your best source of information on handling spam. It has

• A list of pros and cons about the POP and IMAP options
• Instructions on setting up the most common e-mail clients to take advantage of spam scoring
• Details on customizing your personal spam settings

As of March 3, 2003, the Computing Help Desk will be available to help you implement the spam solution that is right for you. You can reach them at x3-1103 or <computing-help@mit.edu>.

Beware of Browsers Storing Passwords

Most web browsers prompt you to store passwords for every site needing a password. This feature can be useful, but can also put your money and personal information at risk if you are not careful.

Information Systems recommends that you do not store passwords in your browser for sites that have

• Private information about you or someone else (e.g., medical records)
• Private financial information (e.g., credit card numbers)
• Private correspondence (e.g., e-mail).

If someone sits down at, steals, or hacks into a machine that has your passwords for such sites stored by the browser, he or she could access those sites posing as you and cause you a lot of suffering. This person could buy items on your credit card, steal your identity, or access private data about others with which you’ve been trusted, making you liable for leaking that information. Be careful and remember, if you are able to access any information you wouldn’t want a thief to have, don’t use your browser to store that password.

Here are some sites you should never store the password for:

• Fidelity NetBenefits
• MIT Federal Credit Union or your bank
• WebMail

You should also have a password on your X.509 web certificate so that no one can steal your certificate to access restricted records. For example, as a student advisor, you can access grade information that should remain private.

So Why Is This Feature Included?

You can safely store your passwords to sites such as online newspapers. If a thief steals your password, all he or she gets is a free subscription to the site. Be careful, though, of such sites if they store items like your stock portfolio.

For instructions on disabling this feature for various browsers, and for more information about this issue, see http://web.mit.edu/ia/is/help/browsers/storingpasswords.html.
Pushing New Extremes: Apple Revamps Its Product Line

- Kathleen Moriarty

As the new year advances, Apple Computer continues to unveil changes to its product line. These range from Airport Extreme, a higher speed wireless technology, to faster desktop systems, to new PowerBooks and a 20-inch flat-panel Cinema Display. In addition, Apple has reduced pricing on many earlier models. The new PowerBooks and Power Macs can only boot into Mac OS X 10.2.3 or higher. Programs written for Mac OS 9 (or earlier versions) will run on Mac OS X in the Classic environment. In addition, the 20-inch Cinema Display requires Mac OS X 10.2 or higher to function correctly.

AirPort Extreme
Apple’s AirPort Extreme lets you connect to the Internet without wires, additional phone lines, or complicated networking hardware. The two new AirPort Extreme base stations are much faster than the earlier AirPort: with an AirPort Extreme capable system, users can connect at speeds of up to 54Mbps – compared to 11Mbps previously. The technology supports Wireless Encryption Protocol (40- or 128-bit).

Both models include two 10/100BT connectors – for attaching a system without wireless capability and for connecting to a wide area network such as MITnet. Both have an internal antenna and a USB port for compatible printers. The high-end model has a port for an external antenna and a 56K V.92 modem.

The new 802.11g base stations are backwards compatible. This means that they will work with existing wireless networks, and that systems with 802.11b wireless cards will be able to use them.

Apple has also released AirPort Extreme cards for its new machines. To support the higher speed of 54Mbps, these cards use a different connector based on Mini PCI. These cards work only in the new systems – they aren’t compatible with older machines.

New PowerBook G4s
Apple has expanded its PowerBook G4 line with two new models, one with a 12-inch display and the other with a 17-inch display. Both are built of lightweight, durable aluminum alloy.

The new PowerBooks support AirPort Extreme and Bluetooth, a wireless technology that acts as a cable replacement and lets you communicate with Bluetooth-enabled cell phones, PDAs, and printers. Standard connectors include 400Mbps FireWire, two USB ports, and a video connector for an external display. Both models come with a built-in 56K V.92 modem.

The 12-inch model is 1.8-inches thick and weighs just 4.6 pounds. Crisp video is supported by the GeForce4 420 Go graphics card with 32MB of dedicated RAM. This model ships with a G4 processor running at 867MHz, 256MB of L2 cache, 256MB of double data rate (DDR) RAM (expandable up to 4096MB), a 40MB ATA/100 hard drive, and a slot-loading combo drive (DVD-ROM/CD-RW). Battery life is up to five hours.

The 17-inch model is one-inch thick and weighs 6.8 pounds. In performance, it competes with desktop systems – it has a 1GHz processor, 1MB of L3 cache, and 512MB of DDR RAM (expandable to 4GB). A GeForce 440 Go graphics card with 64MB of RAM supports a resolution of 1440-by-900 pixels. The wide aspect ratio is perfect for playing DVDs.

This model includes the world’s first fiber optic backlight keyboard, with light sensors that automatically adjust the brightness of the screen and keyboard. The slot-loading SuperDrive reads and writes CDs and DVDs. In addition to the standard connectors, an 800Mbps FireWire connector is included, as well as an AirPort Extreme card. Battery life is up to 4.5 hours.

Educational pricing for the 12-inch model starts at $1499, and at $2999 for the 17-inch PowerBook.

Changes at the Desktop
Apple has revamped its Power Mac G4 line, with its fastest desktop systems ever at more affordable prices. Models are available with a single 1GHz processor, dual 1.25 MHz processors, or dual 1.42 processors. The first two come with 1MB of L3 cache; the high-end model has 2MB. Memory is expandable up to 2GB of DDR RAM.

The Power Mac G4s offer impressive expandability, with a 4x AGP slot for the graphics card, four free PCI slots, two USB connectors, two 400Mbps FireWire ports, one 800Mbps FireWire port, a Gigabit Ethernet port, room for two optical drives, and audio in and out. These systems also include a 56K V.92 modem and support for AirPort Extreme and Bluetooth. Users who want Bluetooth need to add it as a build-to-order option at the time of purchase.

Educational pricing for the G4 desktops starts at $1299; the monitor is sold separately.

New 20-inch Cinema Display
Apple also recently introduced the 20-inch Cinema Display, a flat-panel LCD with twice the brightness, sharpness, and contrast ratio of a typical CRT display. It offers 1680-by-1050 pixel resolution, 16.7 million colors, and the same widescreen aspect ratio found in the 17-inch PowerBook.

The 20-inch Cinema Display weighs in at 18.9 pounds. It has two USB ports and a digital Apple Display Connector. This single cable carries all digital video, USB, and power signals between your G4 and the LCD.

The educational price for the 20-inch Cinema Display is $1,299.

Purchase
You can buy Apple’s new hardware through GovConnection or the Apple Store for MIT. For purchasing information connect to http://web.mit.edu/ecat/interim/

For more information about these or other Apple products, contact an MIT Computer Connection consultant at <mcc@mit.edu> or x3-7686.
Tech Tips: MIT TechTime

This column presents answers to frequently asked technology questions. For more Q&As, check the IS Stock Answers database at http://hdstock.mit.edu/stockanswers/.

As announced on page 2, MIT now supports TechTime, a web calendar based on Oracle's Calendar (formerly CorporateTime). Here are some companion Q&As to help you get started.

Q: Where on the Web is MIT TechTime?
A: To get to the calendar, start at http://calendar.mit.edu. You can log in with your personal certificate or your Kerberos username and password. Either one works, and both set up a secure, encrypted connection.

Q: Can I schedule repeating meetings in TechTime?
A: Yes, although the process is a bit tricky. Here’s how you do it:
1. Click the Create a Meeting icon, which looks like a clock with a plus sign beneath it.
2. Under the General tab, enter your meeting data.
3. Click on the Repeating tab.
4. From the Repeat drop-down menu, choose your repeating interval.
5. Select the Start and End dates.
6. Click the List Dates button under the Repeating date list. This will list all the dates to be filled in when you click the Create button. TechTime won’t repeat the meeting if you don’t do this – the tricky part.
7. Click the Create button at the bottom of the window to set the repeating meeting.

Q: Can I change a scheduled repeating meeting?
A: With the web client, not easily. You can either change every meeting entry, one at a time, or find the first occurrence of the meeting and change it there, or delete the entire repeating meeting and create a new one. In the web client – with the exception of the first occurrence – there is no way to change one entry and apply those changes to every successive entry.

Q: How do I delete a repeating meeting?
A: Click one of the entries for the meeting to edit it. In the Edit Repeating Meeting window, in the upper-right corner, click the Delete all key.

Q: How do I look at someone else’s TechTime calendar?
A: To view another user’s calendar, follow these steps:
1. Click the View Agendas icon – a calendar page with a person next to it.
2. Type the last name of the person and click Find. This will list all the users with that last name. (Typing a user name or e-mail address won’t work.)
3. Highlight the person whose calendar you wish to see and click View. This user’s calendar will display, but only with the information he or she has allowed others to see.

To display your own calendar again, click the My Agenda icon – a calendar page by itself. Or select your agenda from the Go menu of the browser.

AMPS and IS Aid Museum Loan Network

• Mary Ellen Bushnell

Tucked away on the top floor of N52, a small staff of four renders a worthy service to museums across the country. To accomplish its goal to make objects of cultural heritage more accessible to the public, the Museum Loan Network (MLN) facilitates and funds the long-term loan of art and objects among U.S. museums. Established in 1995, the MLN is administered by MIT’s Office of the Arts and funded by the John S. and James L. Knight Foundation and The Pew Charitable Trusts.

The MLN Directory

A key element of the MLN program is its Directory, a database of over 8,500 museum objects with images and descriptions, published on MLN’s web site. The Directory was created in 1996 and continues to grow as museums contribute information about their objects, many of which might otherwise languish uncataloged and in storage.

To contribute to or to access the Directory, a museum must meet eligibility requirements. Once given access, a museum can search the Directory by such criteria as object type, origin, culture, date, material, or subject.

A participating museum with objects to list in the Directory sends a file to the MLN. After ensuring that the data is in good order, MLN staff add it into a copy of the database. Images that correspond to the object information are uploaded into a web directory.

MLN Directory Upgrade

Until recently, all the MLN data resided in a Microsoft Access database on equipment in the staff offices. The web site was published from a server there, using Microsoft’s built-in web server, Internet Information Services (IIS). While this technology worked to get the Directory started, MLN staff felt vulnerable on several counts – the IIS software is not supported at MIT, the staff didn’t have sufficient expertise to assure system maintenance, and they had been stung by a severe loss of data when a backup malfunctioned.

This past spring and summer, with project management and technical support from Academic Media Production Services (AMPS) and IS, the MLN Directory was upgraded to a MySQL database and the web site moved to an Athena server with round-the-clock maintenance. AMPS continues to provide support to the program.

MLN staff now upload new data and images to staging areas to review. When they are satisfied that the data is correct, they notify AMPS, which in turn moves the files to the live site.

Curious?

For more information about Museum Loan Network activities and initiatives, visit their web site at http://loanet.mit.edu

While only participating institutions can view objects in the Directory, anyone can tour their virtual exhibitions.

http://web.mit.edu/is/isnews/
Talk Circuit: Setting up Audio-Bridge Conference Calls

• Mary Ellen Bushnell

Suppose you want to set up a conference call with colleagues. You can initiate a three-way call from your office phone, or contact the MIT operators to arrange a call for up to five participants. To schedule a call for six or more participants, you need an MIT operator and a special technology called Audio-Bridge, which is used to connect multiple users via standard telephone lines. Participants can call in from MIT or anywhere in the world.

Audio-Bridge technology arrived on campus in the early 1990s with a gift to IS of two desktop conference bridges. Responding to demand, IS Telecommunications and Network Services recently installed additional capacity to the original Audio-Bridge and configured the service so that it can simultaneously host three calls with six participants, one call with 12 participants, and one call with 18 participants.

How to Set up a Call

While you might be able to schedule an Audio-Bridge call for the same day, it’s best to plan ahead a week or two. IS schedules the Audio-Bridges a month at a time, so if you want an Audio-Bridge for, say, every Tuesday in March, contact IS by mid-February. Send the following information to the MIT operators at <tele-info@mit.edu>:

• Name and e-mail address of the main contact
• Date, time, and length of call
• Number of people on the call

An MIT operator schedules the call and sends e-mail confirmation to the main contact. This e-mail message includes the MIT phone number that each participant should call at the appointed time. It is the responsibility of the main contact to forward the phone number to all the participants. Because a call is set up to accommodate just the number of people specified in the request, anyone else trying to call in will get a busy signal.

Making the Call

As participants call in, they hear and are announced by a beep. For the duration of the scheduled time, any participant may enter, leave, and re-enter without affecting the other callers. For a call involving many participants, the main contact may want to appoint a moderator to set the rules and manage the call.

Who Can Use It?
The Audio-Bridge service is free to the MIT community; however, a participant dialing long distance into the call will pay long-distance charges.

More Information
For additional information about IS teleconferencing services, see http://web.mit.edu/is/tel/teleconf.html

For more details about services offered by the MIT operators, see http://web.mit.edu/is/tel/op-services.html

Easymixing.com: What Does Your Face Say about You?

• Cathy Riordan

Can you judge a book by its cover? People make such judgments all the time, and MIT graduate student Yuri Ostrovsky has created a web site to redirect those propensities for a different purpose. At easymixing.com, you can communicate your visual inferences while finding out what other people think about you at first glance.

While it looks like an unconventional dating site, easymixing.com is an experiment in a new method of face processing. Members upload a photo (nothing else!) to be displayed on the site together with randomized and thought-provoking questions for site visitors to answer based on their visual impressions. Photos are not limited to face shots alone. As Ostrovsky maintains, “You can tell a lot about a person by what kind of picture they post. Pictures with non-facial cues aren’t directly useful to our research, but they make the site more fun.”

Clustering and Profiling

The data from easymixing.com will be analyzed via “clustering,” a technique that sorts people into groups, or clusters, based on their profiles. A profile is created from the responses to the questions answered by site visitors. Questions have been selected to represent seven “dimensions” of personality. Logically, if a person consistently gets the same response to a question, that question must be syncing with some physical characteristic.

This technique differs greatly from typical clustering algorithms, where faces are broken down into principle components and then compared. Instead, people’s intuitions are used to establish groups. Since the grouping is based on impressions of faces rather than on analysis of image components, the hope is that the comparisons are more meaningful.

Aside from obvious potential use in dating services, Ostrovsky feels that his research may prove useful for, say, shopping, where ratings can provide suggestions for styles that suit the shopper. When the subject of profiling came up, however, Ostrovsky was adamant that he did not think the uses there are valid. “Although observers may be consistent, that doesn’t make their judgments accurate when you’re talking about personality.”

Future Plans

In a few weeks, the data will be analyzed for the first time. According to Ostrovsky, “The predefined categorizations were just a guideline and may not be ultimately useful in analyzing the data. The appropriate categories will come out of the statistics.” In the future, controlled experiments can be performed by observing perceptions change when a face is altered systematically by computer.

Ostrovsky intends to turn the easymixing.com web site into a full-fledged dating service where individuals can answer questions about themselves as well as receive the opinions of others. The full-fledged dating service will make it possible to sustain the site indefinitely and attract more members for even better data.
If you don’t know where to get help for your computer, network, or telephone problems, dial one of the help lines listed to the right.

If you prefer to use e-mail, you can send your questions to the corresponding e-mail addresses on the far right. (When logged into Athena, you can also use the \texttt{olc} command to send questions to Athena’s online consultants.)

For a complete list of services offered by Information Systems, see http://web.mit.edu/is/services/

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<th>Dial…</th>
<th>Or send a message to…</th>
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<td>Disabilities and computing</td>
<td>3-7808</td>
<td><a href="mailto:atic@mit.edu">atic@mit.edu</a></td>
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<td>Telephone repairs</td>
<td>3-4357</td>
<td><a href="mailto:5help@mit.edu">5help@mit.edu</a></td>
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<tr>
<td>UNIX/VMS (by subscription)</td>
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<td><a href="mailto:unix-vms-help@mit.edu">unix-vms-help@mit.edu</a></td>
</tr>
<tr>
<td>Voice mail</td>
<td>3-3677</td>
<td><a href="mailto:vmail@mit.edu">vmail@mit.edu</a></td>
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</table>

Games-to-Teach (see lead article) is one example of an iCampus project. Begun in 1999, this five-year alliance between MIT and Microsoft Research aims to enhance university education through information technology. iCampus sponsors innovative projects with the goal of making a significant, sustainable impact at MIT and elsewhere.

Projects of varying scope, developed by faculty and by students, are in progress around campus. To get an idea of the range of initiatives, see the short list of iCampus projects on the right.

To learn more about iCampus projects, including the ones listed below, visit http://www.swiss.ai.mit.edu/projects/icampus/projects/

A Sampling of Projects

\textit{Classroom Communicator}

\textit{Engineering School Modular Program for Fluid Mechanics}

\textit{MyCare Mental Health Network}

\textit{Online Essay Evaluation}

\textit{Robotworld}

\textit{Shakespeare Video Annotation}

\textit{Software Tools for Environmental Study}

\textit{StudioMIT – Learning Communities in Design Education}