While medicine looks for solutions, adaptive computing devices fill the void

Larry Bowie
Institute Communications and Public Affairs

Imagine that you’ve lived for 60 years with excellent vision. Slowly, your sight becomes blurred. Straight lines appear wavy. Distances become difficult to judge. Gradually you notice a growing blind spot in the middle of your field of vision. Eventually, you may be left with only peripheral vision.

That’s the scenario for more than 1.6 million Americans with age-related macular degeneration (AMD), the most common cause of vision impairment among people aged 60 years and older, according to the National Eye Institute (NEI), one of the National Institutes of Health (NIH). That number is expected to increase rapidly over the next 30 years with the aging of baby boomers — the first generation to use computing devices as a part of their daily lives.

With more people facing the threat of vision impairment from eye disease, engineers at Georgia Tech are working to understand the strategies that people with visual impairments exhibit while using computers. From this, they hope to develop computing devices to help those who suffer from visual impairments make the most of what they have left.

Improving Quality of Life
In a new study, Tech researchers are working with physician scientists and medical staff at the Bascom Palmer Eye Institute (BPEI) in Miami to develop computer-based, low vision technologies that can automatically adapt to the visual capabilities of individual users.

There is not yet a cure for AMD, so the goal of the research team is to develop technologies that help improve the quality of life of people who have the disease. While research studies are under way to learn why people develop the disease and how to better detect, treat and prevent it, there has been little work in the area of improving their quality of life, said lead researcher Julie Jacko, a professor in the School of Industrial and Systems Engineering and co-director of the Laboratory for Human-Computer Interaction and Health Care Informatics.

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Tech and IPST start incorporation, search for new director

Michael Hagearty
Institute Communications and Public Affairs

Last fall, the Institute of Paper Science and Technology (IPST) announced the desire to incorporate its operations into Georgia Tech, formalizing a long-standing partnership that becomes official in July. IPST, located on the northwest edge of campus, will become an interdisciplinary research institute on the Tech campus.

Upon integration, the Institute’s full title will be “Institute of Paper Science and Technology at Georgia Tech.” Several transition teams and working groups are actively involved in planning for the incorporation of IPST’s operations into Tech’s academic and administrative structure. A steering committee chaired by Charles Liotta, vice provost for research and dean of graduate studies, is coordinating these activities.

Principal among those efforts will be to appoint the inaugural director of IPST at Georgia Tech.

To help identify qualified individuals, Provost Jean-Lou Chameau recently appointed a 12-member advisory search committee, chaired by Professor Bill Koros, Goizueta Chair in Chemical Engineering, to screen potential candidates. The search firm of Baker and Parker was hired to facilitate the process. During the interim, Ron Rousseau, who chairs the School of Chemical Engineering, will act as the interim director.

In describing the position, Chameau cited the need for an individual with “superb strategic and leadership capabilities,” who will “define the technical direction of IPST and enhancing its relationship and service to the industry.” It is expected that the person selected will have the credentials to hold a faculty position in one of the academic units at Georgia Tech.

Established in 1929 as the Institute of Paper Chemistry, IPST is an academic and research institution whose purpose evolves from its unique relationship with the pulp and paper industry. Its faculty members are experts in fields ranging from biology and chemistry to engineering and paper materials. The Institute, which moved to Atlanta from Appleton, Wisc., in 1989, is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools, and awards both Master of Science and Doctor of Philosophy degrees.

Search committee
William Koros [chair], Chemical Engineering
Cyrus Aidun, PST
Sujit Banerjee, PST
Veda Christmas, PST
Chuck Donbaugh, Human Resources
Chuck Eckert, Chemical Engineering
Shaldon May, Chemistry
Pat McKenna, Development
Dale Stahl, IPST Trustee
George Weyerhaeuser, IPST Trustee
Gregory Wiley, graduate student, PST
Georgia Tech graduate student
People have realized video games are culturally valuable and worthwhile to study. It’s a brand new vista of opportunity.” —John Endicott, director of the Center for International Policy, on the rising ambivalence toward the United States on the part of South Korean citizens.

“There’s this residue of good-will among people my age (66) — but it’s the kids! The shared hardships that my generation went through, and the generation before me, with the Korean War, just aren’t there anymore.” —John Endicott, director of the Center for International Policy. (San Francisco Chronicle)

“Sometimes you don’t know what’s going on in the people’s ‘visual search strategies’ — what they’re able to analyze what they call a person’s ‘visual search strategies’ — and if a person attempts to use a computer technology today, his or her ability to use that technology today may be very different from his or her ability to use that technology six months from today.” —Chris Shaw, a senior research scientist in the Center for International Policy, on the increasing number of colleges and universities that offer courses and degrees in video game design. (Atlanta Journal-Constitution)

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Nursing mothers to benefit from ADVANCE grant

According to a 1998 report from the Census Bureau, of the 3.7 million women with infants less than one year old, 59 percent were in the labor force. As new mothers try to balance both their working and familial obligations, having amenities on campus that facilitate these duties can make a very big difference.

At Georgia Tech, monies from a federal grant awarded to improve the environment for women in academic institutions will go toward a new initiative to provide nursing mothers with lactation centers on campus.

Beth Gourbière, the project coordinator for the ADVANCE Program, said the purpose of the new campus nursing moms program is to provide Tech’s mothers with a sanitary, onsite location to continue the benefits of breastfeeding without adding stress to their already busy lives. In all, the program will fund five such nursing centers around the campus, each supported by a “SuperMom,” an employee in the building who has been trained to provide support and oversee its operation.

Construction of the first center, located in the first floor women’s lounge of the Administration Building, was completed in December and is fully operational. Each center will serve a particular area on campus, Gourbière said. The second location is planned for the Student Center, with the final three yet to be determined.

Monique Tavares, a project director in the College of Engineering, is the SuperMom for the first center. She was also a strong voice of support for the creation of the nursing centers. “When I had my third child while working here at Georgia Tech, I had the good fortune of working for a progressive supervisor and with co-workers who were accommodating, supportive, and aware of the benefits for both baby and me to provide me the time and private space to express. Breastfeeding is often such a taboo subject, and even more so in the work environment, though it’s the most natural form of nutrition for babies,” said Tavares.

Open to all faculty, staff and students, the centers will contain a professional grade pump, mini-refrigerator, chair, table and parenting literature. Mothers will need to register with Gourbière and undergo a brief training session before they may reserve time.

“I’ve met several moms who wanted to express while at work, but didn’t have a clean private space to do so,” Tavares said. “This program provides moms returning to work and school with a private, clean, relaxing environment to support those mothers who choose to express, making it an easier transition back into the work routine. It’s an important step for family-friendly programs on campus.”

The centers are one objective of the ADVANCE Program for Institutional Transformation, a grant awarded by the National Science Foundation for the purpose of increasing female representation in scientific and engineering disciplines. Announced in 2001, the five-year grant funds professorships, conferences and training, but it also serves to initiate and strengthen new and existing work/family policies on campus.

The effort, which has the full backing of the provost’s office, is part of a larger Institute goal to increase diversity among senior administration by creating policies that affect the full participation and advancement of women.

IN BRIEF:

Change in HTS graduate program reflects faculty strengths

The School of History, Technology, and Society (HTS) has changed the name of its graduate program and graduate degrees from “History of Technology” to “History and Sociology of Technology and Science,” to more accurately reflect the breadth of the program and its considerable strengths in sociology and the study of science.

The Board of Regents of the University System of Georgia recently approved changing the names of the master’s and doctoral degrees to Master of Science in History and Sociology of Technology and Science and Doctor of Philosophy with a major in History and Sociology of Technology and Science.

For years the school’s faculty was composed primarily of historians, reflecting the legacy of former school chair and professor Mel Franzberg, founder of the Society for the History of Technology and widely regarded as the founder of the history of technology discipline. Over the past several years, the School has consciously added more faculty with sociology backgrounds including such notable additions as Mary Frank Fox, gender; Willie Pearson, Jr., science and family; and Sue Rosser, women and science and women’s health. Carnegie Mellon University, the Massachusetts Institute of Technology, and the University of Pennsylvania offer similar hybrid programs in history and sociology.

HTS launched its graduate program in 1992. Topics that current students are researching include the role of radio technology in the Cold War, sociology of cancer research, women in architectural space, economic development in biotechnology, and history of the printing industry.

Book award

The Organization of American Historians (OAH) has selected History, Technology and Society Associate Professor Steve Usselman’s recent book, “Regulating Railroad Innovation: Business, Technology, and Politics in America, 1840-1920” (Cambridge University Press) as winner of this year’s Ellis W. Hawley Prize. This award is given annually to the best book published in the history of political economy, politics or institutions of the United States, domestic or international, from the Civil War to the present. Usselman will receive his award at the annual OAH meeting this April.
C A M P U S  E V E N T S

Arts & Culture
Feb. 7
The Fert Center for the Arts welcomes the Limon Dance Company for an 8 p.m. performance. For tickets, call 894-9600.

Feb. 8
Jazz musician Terence Blanchard, originally planned for Jan. 18 at the Fert Center for the Arts, has been rescheduled. For tickets and information, call 894-9600.

Brown Bags/Conferences/Lectures
Jan. 24
The Institute of Paper Science and Technology’s Distinguished Lecture Series welcomes Patrick Moore, founder of Greenpeace, on “Trees Are the Answer.” At 11 a.m. in IPST’s Fess Auditorium. To watch the event via live webcast, visit www.ipst.edu/lectureseries.html. For more information, call 894-9592.

Jan. 28
The Seminar Series in Natural Systems, an interdisciplinary series designed to highlight research and provide new cross-disciplinary, nature-inspired ways of solving human and industrial problems, hosts Duke University Professor Dan McShea on “Two Hypotheses About Hierarchies” at 1 p.m. in the NAEF auditorium. For more information, e-mail carl@isye.gatech.edu.

Feb. 4
The Office of Organizational Development sponsors a “Legislative Update” brown bag, featuring Andrew Harris, special assistant to the president, on the upcoming Georgia Legislative session, at 11:30 a.m. in room 301, Student Center. To register, visit www.trainweb.gatech.edu.

Feb. 20
The Office of Sponsored Programs hosts a brown bag workshop on “Intellectual Property” from noon - 1:30 p.m. in room 119, Centennial Research Building. To register, call 894-6944 or e-mail nadia.zitan@oisp.gatech.edu.

Miscellaneous
Jan. 27
A kick-off celebration for the new Georgia Tech Cancer Research Council (GTCRC) will be held in the atrium of the Petit Institute for Bioengineering and Biosciences at 4:30 p.m. For more information, contact Al Merrill of the GTCRC, at al.merrill@biology.gatech.edu.

Upcoming
Feb. 6
Poets Stephen Dobyns, Thomas Lux and H. Bruce McEver will read some of their compositions at 4:30 p.m. in the Clay Theater, Student Success Center. For more information, visit www.iac.gatech.edu/poetry.html.

C L A S S I F I E D S

AUTOMOBILES

1993 Nissan Altima GXE. Automatic, 4-door, white, FL, tilt, cruise, a/c, 119K miles, good condition. $2,600 OBO. Call 404-770-2099 or e-mail yufeng.sui@is.gatech.edu.

1997 Honda Civic LX. 4-door, white, FL, tilt, cruise, a/c, surprisingly low 116K miles, excellent condition, $5,500. Call 894-1270.

1999 Subaru Impreza Rally Sport. Blue, excellent condition, 46K miles, WRD, sunroof, alarm/keyless entry, 6-disc CD, extended warranty, $12,500. Call Greg Hale at 678-521-7710 or e-mail durelen@mindspring.com.

Computers
HP Photosmart P1100 printer. SmartMedia and Compact Flash card readers. Extra black ink cartridge. $125 OBO. E-mail chris.simplon@stt.gatech.edu or call 385-2990.

Dell Dimension 4100, 933MHz, Windows 2000 Professional, 40 GB hard Drive, 24MB Memory, 12x DVD-ROM, 8x4x32 CD-RW. 17” Trinitron, excellent system speaker and subwoofer, $650. Call 894-7052 or e-mail christopher.head@pa.gatech.edu.

Penium 4 1.4GHz, 256MB memory, 200GB IDE, DVD-COMBO combo, integrated 10/100 NIC, integrated 56K modem, 15” XGA display, Windows XP, $1200 OBO. Call 770-309-5624 or e-mail charles.andry@ipst.gatech.edu.

Furniture
Round glass-top kitchen table set with four white, wicker chairs, comes with covered cushions and matching stand, $175. Photo available. E-mail mark.baran@icpa.gatech.edu.

5-piece entertainment center, white-washed pine finish, lighted glass shelves. Center armoire holds up to 32” TV and other components. $600 OBO. Pictures available. E-mail debbie.wins@gti.gatech.edu.

Empire-style “shabby chic” dining chairs: cherry finish, upholstered seats. 3 side chairs, 1 arm chair. Will include custom-made, off-white slip-covers for side chairs. $60. E-mail leesie.trammell@ibb.gatech.edu.

New caramel-colored, three-person, Sealy leather couch, less than 6 months old, perfect condition. $750 OBO, originally $1,500. Selling for relocation. Call Christina, 894-9597.

Real Estate/Roommates
Custom-built, all-brick ranch with in-law suite and pool on 1+ acres in Conyers. $5/15.5, large office, garage w/third door, hardwoods and Berber carpet. Asking $294,900. Call 894-5352 for photo.

Home for sale in Henry County. 3BR/2BA; Jacuzzi; W/D connection; a/c. Asking $17,000. Call 894-8191 or e-mail jackwood@gti.gatech.edu.

Contact Al Merrill of the GTCRC, at al.merrill@biology.gatech.edu.

Men’s bike, Huffy 18-speed, great tires. $40. E-mail leesie.trammell@ibb.gatech.edu.

Miscellaneous
1999 Fleetwood Singlewide mobile home. $30/28A, Jacuzzi; W/D connection; a/c. Asking $17,000. Call Denise at 404-762-5124.

Denon 6+1 CD player. $51. E-mail richard.howell@neetrac.gatech.edu or call 404-675-1829.

Sofa slipcover from Linens N Things. Off-white, fits large sofa. $40. E-mail leesie.trammell@ibb.gatech.edu.

1 set of four Rock/Crawler black rims, size 15x10 with center chrome insert. Great condition. $150, will fit Jeep. Call 894-8592 or bob.lang@gatech.edu.

The Whistle reserves the right to edit ads longer than 30 words.