On the leading edge

Networking and mentoring the focus of leadership conference

Robert Iesmith
Communications & Marketing

On Nov. 7, 49 women staff members from across campus gathered to network and to hear about the dynamics of women in the workplace. The focus of the inaugural Women Leading @ Tech conference—which coincided with the first semester’s Leadership Conference, sponsored by Student Affairs—is to help women in leadership positions network with one another and create mentor/mentee relationships.

According to recent surveys of women in leadership roles, Georgia Tech Human Resources Senior Director Pearl Alexander says respondents listed having mentors and networking as the most important aids in a successful career.

“Many times, women can come into leadership positions and tend to feel isolated, as there are not too many other women at the same level in that person’s unit,” Alexander said. “With this group, these women’s paths can cross, and they will be enriched through the networking opportunities.”

Women Leading @ Tech was the result of the Institute’s ongoing efforts to reach its diversity goals. While she says there is still a way to go in this regard, Alexander has been turning her efforts toward the Institute’s female employees.

“For the last few years, the steering committee noticed that a majority of the classified staff is female and currently represents 54 percent of this segment of our workforce,” Alexander said. Women also represent 38 percent of the targeted population for the initiative. “In Human Resources, we are designing a new comprehensive performance management process. As a part of this,

Leadership continued, page 3

Tech builds on excellence with GRA Eminent Scholars

Don Fernandez
Communications & Marketing

Two internationally renowned experts in sustainability have joined the Georgia Tech faculty as Georgia Research Alliance Eminent Scholars.

John C. Crittenden, an accomplished expert in waste management, pollution prevention and sustainable and environmental engineering, will join Tech as a GRA Eminent Scholar in Sustainable Systems. Crittenden also will serve as director of Tech’s Brook Byers Institute for Sustainable Systems and is slated to fill the Hightower Chair in Sustainable Systems, pending Board of Regents approval.

Philippe Van Cappellen, an internationally renowned environmental geochemist, is the Georgia Power GRA Eminent Scholar in Global Climate Studies in Georgia Tech’s School of Earth and Atmospheric Sciences.

Crittenden has received multiple awards for his research in the treatment and removal of hazardous materials from drinking and groundwater. He also has designed and received copyrights on computer software programs that analyze various pollution and absorption methods.

The American Institute of Chemical Engineers’ (AIChE) Centennial Celebration Committee recently named

Scholars continued, page 3

A conversation with...

Professor Jayaraman discusses the recent federal “bail out” bill

This year’s election proved no tranquilizer for a quickly destabilizing market—powerful forces are in effect.

Just weeks prior, President George W. Bush and congressional leaders passed a sweeping $700 billion “bailout” plan for the nation’s financial sector, hoping to ease economic strains and lessen what could be a long-term recession.

But, as the recent candidates were fond of saying, what does the Wall Street bailout mean for Main Street? The Whistle caught up with College of Management Professor and Area Coordinator for Finance Narayanan Jayaraman, asking for his perspective.

What is the origin of the crisis?

The fundamental problem is that people who should not have been given loans, got loans. And the reason for that was that money was cheaply available in 2001 and

2002. The interest rate was really low, and the originators of the loans—the mortgage companies—didn’t keep the loans on their books.

Their incentive was just make the loans, take their 1 or 2 percent commission, and then sell them. Then Fannie Mae (Federal National Mortgage Association) and Freddie Mac (Federal Home Loan Mortgage Corporation) would buy these home loans, repackage them and sell them as securities.

So they sell a bundle of loans? Whoever buys those mortgage-backed securities, their return would depend upon people who borrowed the loans paying their interest payments. When you get those thousands of loans together, you then slice them into, say, six categories, (ranging from) high-quality to low-quality.

What happened is that the rating companies did not do a good job of grading the loans.

Then people started defaulting on their home payments, which in turn affected the securities backed by these loans. Compared to the ‘olden days,’ there was no direct relationship between the bank that gave the loan and the homeowner.

If I had a loan and I got laid off from my job, I could go to my bank and ask for, say, three months’ forgiveness on the loan.

People could ask to work it out? Exactly—they could work it out. The one-to-one correspondence got completely lost. What happens is the whole pricing of that mortgage-backed security depends upon some assumptions about how many people are going to default and not make those interest

Jayaraman continued, page 2

Nunn tapped for advisory role

Former Senator and Distinguished Professor Sam Nunn has been tapped by President-elect Barack Obama to be “an informal senior advisor throughout the defense transition process,” although he will not have a formal position on the transition team as reported by the Associated Press.

Nunn, namesake of the Sam Nunn School of International Affairs, is co-chairman and chief executive officer of the Nuclear Threat Initiative, a charitable organization seeking to reduce the global proliferation of nuclear, chemical and biological weapons. He served as a U.S. senator from 1972 to 1996.

The Nunn School of International Affairs was established in 1990 and named for Nunn in 1996.

For more information...

Sam Nunn School of International Affairs www.inta.gatech.edu
Jayaraman, cont’d from page 1

payments. Sometimes, the assumption was that if I bought a mortgage pool, then 1 or 2 percent of the people made their payments, so that was factored in the pricing of the security. But when a large number of borrowers stop making the payments, then the value fails.

Suddenly the entire economy is going down, and homeowners are not able to make their payments. Home prices are going down—not through the entire United States, though. Some markets, like California, Florida and Nevada were part of a bubble. Now, the way the states allow home loans are called “loans without recourse,” so if I’m not able to pay my home mortgage, I can walk away from the home. The lender cannot come after my other assets. So the banks repossess the homes, and there’s nobody to buy them.

But even if there is, the value is probably less than the loan. It is less. So banks have a lot of these mortgage-backed securities on their books. And fundamentally, nobody knows how to value these prices. In this country we have about 600 million mortgages outstanding (people holding these loans). We have about 3 or 4 million mortgages that are not able to make payments and separate out the genuine cases— that is, they were misled by the mortgage originator—and keep them in the home it could be valuable. But in many of those there are speculators who are involved. And given the economic conditions, people are losing jobs—currently the unemployment rate is about 6 percent, and it is expected to go to around 8 or 9 percent in the next one or two years.

That sounds really high.

Remember, in the Great Depression years it went to 25 and 30 percent. So, yes, while in these bad, they’re not as bad as we’ve seen.

The home crisis ultimately started with people talking what we call “NINJA” loans—"no income, no job, no assets”—poor credit—equally people were getting loans. This became globalized because a lot of people like the Japanese, Chinese and Germans had a lot of capital, so they were buying these mortgage-backed securities. Which in turn were rated by Standard & Poor’s as triple-A, the highest quality. But truly they were not triple-A.

This is where the rating system failed.

They did not conduct due diligence, and their (rating) model is not publically known. There is blame to go around everywhere, including the CEOs of the banks. Their compensation and bonuses were determined by the year’s profit. So if I am Merrill Lynch or Citigroup’s CEO, I made a lot of money in 2005 and 2006. If you are a top manager, you had even more incentive to take a risky strategy.

One of the things that is likely to happen is the bonus pools for top management will be more buffered. Whatever profits a CEO makes in 2008 will probably not be given in the beginning of 2009, but in probably three to five years. But there really is no one “villain” in all this. It started with low interest rates. People were getting loans they should not have gotten, and the rating agencies were giving ratings that weren’t deserved. Everybody is on the gravy train.

OK, how do we fix the problem?

One of the fixes is that housing prices have to come back up to reasonable levels.

Well, do you think they’re undervalued now? Or do you think the fall of housing prices gives that reasonable level?

No, it’s still less. The Case-Shiller National Home Price Index forecasts that housing prices have to go down some more—15 or 20 percent, I think. That index suggests they will not start rebounding until late 2009, or early 2010.

Which brings us to the $750 billion bill.

I think it’s the right fix. But how it’s executed is going to be an issue. In the first stage, the government has decided to give banks $250 billion for capital, so they can start loaning money. But the problem is that the banks continue to pay dividends, which they should not be doing, and SunTrust Bank announced (that since) they are accepting (government) money, the bank’s board has said it’s improper to pay out (to shareholders).

Unfortunately, the government has not put a condition on the money. They did for the Chrysler bailout in the 1980s. Hopefully this will be sorted out soon. The banks should do the proper thing, (especially) if they need to go back to the government (for help).

With the second $250 billion, the government is thinking of acquiring the bad assets on the banks’ balance sheets, so there may be some pressure on the banks to cut their dividends. Another thing is deciding how the government is going to price these assets on the bank’s balance sheet. As an example, let’s say Citigroup is sitting on assets of $1 billion on the balance sheet. They currently recognize that the quality of the assets is not worth $1 billion—let’s say they have valued it down to $650 million, or 65 cents on the dollar. How do we know the true value?

So the government wants to take (these assets) off the bank’s balance sheet and put it on the taxpayer’s balance sheet. The big question is how do you come up with that number. If the government says it is only going to pay $400 million, the bank may not have an incentive to move items over. Somebody will have to take a cut, so the government needs to devise a mechanism to determine the price. Implementation is important. If it is done rightly, then hopefully things will get sorted out in the next six months to one year.

And the last $200 billion? I had read [that] the government is thinking of directly injecting some of the money to homeowners, to buy some of the mortgages. Let’s say the homeowner has a loan with a 9 percent rate. The government will tell the bank, “if you’re willing to rewrite the contract at 7 percent fixed rate, we will guarantee the loan.”

So they are targeting the economy in three different ways. They are giving money to the banks so they can use the capital to loan to homeowners, they are buying bad assets from the banks so that the capital ratio is better, because the banks are under-capitalized; and they are directly going to the homeowners who deserve a break. Not the speculative guys. They should absorb the loss, because they knew what they were getting into.

What about the Federal Reserve Bank’s lowering of the interest rate? It’s going to help some, I think. But it’s not going to help in a big way, because the Fed is almost out of the lead from the financial markets. [Two days prior] the market went up 800 or 900 points, because they were anticipating the Fed rate cut. Ideally, I don’t think the Fed wanted to cut the rate, because remember this whole trouble started with a low interest rate. Everybody’s trying to reduce their debt. Starting with the banks, companies and now even individuals like you and I are trying to think instead of blindly sliding our plastic cards.

Things look gloomy now, but I have a lot of belief in the American economic system. It will all come back. I saw where the third quarter of the U.S. economy shrank by 5 percent. They expect the fourth quarter to shrink by the first quarter of next year to be a negative growth. So there will probably be a recession, but it will come back. We are a $14 trillion economy, and things have to work their way through.

Jayaraman is the Evelyn T. and Nallothy C. Jones Jr. Professor. His research interests are in corporate finance, options markets, capital markets, corporate bankruptcy and entrepreneurship. He has won several teaching awards, such as the Institute Junior Faculty Teaching Excellence Award, Roe Stamps IV Excellence in Teaching Award, Lily Teaching Fellowship Award and Core Professor of the Year award in the MBA program.

More information:

The Whistle
www.whistle.gatech.edu


"Air craft take off at ambi- ent ground temperatures and quickly reach their cruising alti- tudes, where the temperatures tend to be below zero. It’s these changes in temperature coupled with inherent vibra- tions that affect the deteriora- tion and lifetime of electronic equipment."

—Industrial and Systems Engineering Assistant Professor Yagi Gebran, on partnering with components manufacturer Rockwell Collins Inc. to model the "lifespan" of aircraft electronic compo- nents. (Industry Week)
process, we want all employees to be planning their careers here at Tech. Are they where they want to be? Are there systemic or programmatic changes we need to undertake? We need to give them options. When you have options, you have hope.”

In advance of the conference, invitations were sent to female senior professionals of specific pay grades. Sponsored by the Institute Steering Committee on Diversity, the conference is the first activity of a planned long-term initiative.

Alexander conferred with both the Institute Steering Committee on Diversity and the new vice provost of Academic Diversity (VPAAD), Biomedical Engineering Professor Gilda Barabino, in executing the event. Although primarily for women in staff leadership positions, Alexander sought the wise provost’s involvement because “we are one. Georgia Tech. We need to make sure we link diversity and inclusion initiatives for faculty and staff. It takes more than one person, more than one office.” Chaired by Monique Tavares, director of Faculty Career Development Services, the planning committee included Alexander, Mollie Mayfield, associate director of Athletics in the Athletic Association; and Martha Sullivan, senior director in Human Resources; Nicole Stephens, manager of Campus Communications in Human Resources; and Yvette Upton, director of the Women’s Resource Center.

“Planning your career is a continuous process,” Tavares said. “Making contacts, knowing who’s who is important. There are many proactive things we can do to be happy, enjoy our work and be engaged in what we do. For me, getting involved in events such as this is invaluable in making those connections. Working with the planning committee is a laudable example.”

While networking and mentoring were the focus, speakers included professional women from and outside of Tech. Helene Ganssen Lollis, president of PATHBUILDERS Inc., and Judy Agerton, executive director of External Affairs at AT&T Georgia and president and CEO of the Women of AT&T, joined former College of Management Dean Terry Blum, General Manager of Georgia Tech Research Corporation Jilda Garton, Tech alumna Mary McElroy—winner of the Georgia Power GRA Eminent Scholar in Global Climate Studies—and currently is associate editor of the Geomicrobiology Journal.

Prior to coming to Georgia Tech, Crittenden was the Richard Sonell Presidential Professor in the Department of Civil and Environmental Engineering at Arizona State University. Van Cappellen is investigating the connection between human activity, including power generation and global environmental change. In particular, he is studying how the key nutrient elements nitrogen, phosphorus, silicon and iron affect the global carbon cycle on the continents, in coastal areas and in the oceans.

“We are thrilled to have Dr. Van Cappellen at Georgia Tech,” said Paul Houston, dean of the College of Sciences. “He was an assistant professor and an associate professor at Tech between 1991 and 1999, so we welcome him back. I am confident he will be highly successful as the Georgia Power GRA Eminent Scholar in Global Climate Studies.”

Prior to his appointment, Van Cappellen served as the chair of geochemistry at Utrecht University in The Netherlands for nine years. He has earned numerous accolades, including the Pioneer Award from the Netherlands Organization for Scientific Research and the André Dumont Medal from the Belgian Geological Society. He was also the founding director of Utrecht University’s Center for Soil, Water and Coastal Resources.

“Geometric microorganisms live in nature, in the environment, and in the human body,” Van Cappellen said. “They are an integral part of our lives and the environment. We need to better understand how they function and how they impact the environment.”

Dr. Van Cappellen will hold an appointment in the School of Civil and Environmental Engineering. In this position, he expects to continue growing Technologies, a company that he founded in 2000.

A former Georgia Power GRA Eminent Scholar, John C. Crittenden served as director of the School of Chemical Engineering at Louisiana State University. He joined Georgia Tech in 2004 as the Georgia Power Chair of Environmental Engineering in Global Climate Studies. Since being named the Georgia Power Chair, Crittenden has made significant contributions to the environmental engineering field, including the development of new technologies for the capture and storage of carbon dioxide.

“Georgia Tech is a leader in environmental engineering,” said John C. Crittenden. “I am excited to return to Georgia Tech as the Georgia Power GRA Eminent Scholar.”

“I am excited to return to Georgia Tech as the Georgia Power GRA Eminent Scholar,” Van Cappellen said. “I am confident he will be highly successful as the Georgia Power GRA Eminent Scholar in Global Climate Studies.”

For more information, visit www.gatech.edu.

WLC names Women of Distinction

The annual Women’s Leadership Conference recognized its 2008 Women of Distinction. From left are staff honor honoree Amelia Gambino, assistant vice president of Communications & Marketing; undergraduate student Andrea Trillo; [back row] graduate student Joanna Hass, Electrical and Computer Engineering Associate Professor Ayanna Howard and Tech alumna Patrice Perkins-Hooker. For more information, visit www.gtwlc.com.

IN BRIEF:

CIOS opinion survey opening

Georgia Tech’s Course-Instructor Opinion Survey opens Nov. 24 and will continue through Dec. 14 for students to offer feedback on fall 2007 course. For more information, visit www.coursesurvey.gatech.edu/login.cfm.

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C A M P U S  E V E N T S

Arts & Culture

November 21–23
BalletHeath’s “Urban Nutcracker” comes to the Ferst Center for the Arts, giving the audience a trip down Sweet Auburn Avenue in the 1940s. Sometimes vary, and ticket prices range from $52 to $29. For more information, visit www.ferstcenter.gatech.edu.

Through November 22
DramaTect Theater presents “Arcadia,” a play that revolves between past and present set in an English manor. Each show begins at 8 p.m. Tickets are $5, $8 and $10. For more information, visit www.dramatech.org.

December 6
New York City’s Dirty Sock Funtime Band performs its children’s music at 11 a.m. in the Ferst Center for the Arts. Tickets range from $12 to $18. For more information, visit www.ferstcenter.gatech.edu.

Labeled “the Jimi Hendrix of the violin” by The New York Times, Ireland violinist Eileen Ivers performs “An Nollaig—An Irish Christmas” at 8 p.m. in the Ferst Center for the Arts. Tickets range from $20 to $32. For more information, visit www.ferstcenter.gatech.edu.

Conferences & Lectures

November 18
Coalter Department of Biomedical Engineering and Petit Institute for Bioengineering and Biosciences Professor Niren Murthy presents “New Materials for Treating and Imaging Inflammatory Diseases,” starting at 3 p.m. in room G011 of the Molecular Science and Engineering building. For more information, visit www.chemistry.gatech.edu.

November 21
The School of Economics Fall 2008 Symposium series concludes with Texas AM Professor Amy Glass presenting “Intellectual Property Policy and International Technology Diffusion,” from 11:15 a.m. to 12:45 p.m. in room G-17 of Habersham. For more information, visit www.econ.gatech.edu.

December 2
Johns Hopkins University Professor James E. West presents “Noise in Hospitals: Effects and Cures,” starting at 11 a.m. in the Ferst Center for the Arts. The presentation is the annual Harold W. Gegenheimer Lecture Series on Innovation at the Woodruff School of Mechanical Engineering. For more information, visit www.me.gatech.edu.

Faculty/Staff Development

November 20
Jill Barber, associate director of the Georgia Tech Counseling Center, presents “Keeping Student Stress in Perspective,” from 11 a.m. to 1 p.m. in the Wilby Room of the Georgia Tech Library. For more information, visit www.cctl.gatech.edu.

The Office of Organizational Development offers the free Brown Bag seminar “An Introduction to Intercultural Communication,” which covers the basics of communicating with non-native speakers of English and the cultural context of communication, from 11:30 a.m. to 1 p.m. For more information, visit www.ordev.gatech.edu.

The Office of Environmental Health and Safety (EHS) presents a course on safety and precautions regarding blood-borne pathogens, from 3 to 4 p.m. in room 490 of the Willingham Hall. For more information, visit www.eme.gatech.edu.

November 24
History, Technology and Science Professor Carole Moore presents the Georgia Tech Code of Conduct for Students from 3 to 4:30 p.m. in the Army Office Building. For more information, visit www.hbs.gatech.edu.

December 3
The College of Management, the Alumni Association and the Women’s Alumni Network present “Advancing Your Career: The MBA Advantage.” From 6 to 8 p.m. in auditorium 300 of the College of Management. For more information, visit www.gtalumni.org/mbaadvantage.

December 10
The Georgia Tech Faculty Women’s Club will hold its annual holiday party from 5:30 to 8:30 p.m. at the Alumni Faculty House, 190 North Avenue. For more information, visit www.gtfcw.gatech.edu.

Ongoing

Georgia Tech Training Services offers a Web-based tutorial on the basics of using state purchasing card (p-card). For more information, visit www.training.gatech.edu.

The “Defining Customer Service” certificate program provides campus groups and employees with the foundation for offering exemplary service to those both on and off the campus. Four required courses and two electives are offered. For more information, visit www.training.gatech.edu.

Miscellaneous

December 1–2
GVU and the Digital Media Program present the 4th annual Living Game Worlds symposium, in the Technology Square Research Building. The event brings together academia and industry to discuss design and theory in the production and critique of video games. For information and to register, visit www.gameworlds.gatech.edu.

December 3
The Georgia Tech Women’s Forum Silent Auction will be from 11:30 a.m. to 1 p.m. in the Student Center Ballroom. For more information, visit www.gtfwf.gatech.edu.

ARTS & CULTURE

RESERVE BUILDING. For more information, Responses,” from noon to 2 p.m. at the Federal

Science and Engineering building. For more infor-

mation, visit www.chemistry.gatech.edu.

C O M P U T E R S

FORUM.

November 20
The College of Architecture’s Fall 2008 COA Research Forum closes as Visiting Associate Professor Barbara Deutsch Lynch presents “Planning for Disaster: Sere’s Rio Santa Valley and Accelerating Climate Change,” from 11 a.m. to noon, in the Architecture Library. For more infor-

mation, visit www.coa.gatech.edu.

November 21

NOVEMBER 19

City and Regional Planning Associate Professor Brian Stone presents “How Large U.S. Cities are Amplifying Global Warming and Adaptive Responses,” from noon to 2 p.m. at the Federal Reserve Building. For more information, visit www.ferstcenter.gatech.edu.

ARTS & CULTURE

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