

Volgenau School VEWS

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No. 10



Sharon Caraballo

Upcoming Events

January 21, 2012 Alumni tailgate party

February 2, 2012 **Engineers Day**

February 21, 2012 Women Role Models In Engineering 5:30 -7:30 Mason Inn

April 11, 2012 2nd Annual **Technology Symposium** Mason Inn

May 4 Annual Awards Gala

May 22-23 Computer Forensics Conference



A New Face For Undergraduate Programs

he Volgenau School welcomes one of its own to the front office. Sharon Caraballo. the new Associate Dean for Undergraduate Programs. Caraballo came to Mason in 2004 from Georgetown University. She was seeking a more student-facing position, and in her role at Mason she was both teaching and coordinating the undergraduate IT program. She says that though she enjoys teaching, she quickly found a true affinity for her new administrative position. As an administrator actively involved in student affairs, and working closely with the then Associate Dean Bernard White, it was a natural fit for Caraballo to take over the job when White retired last year.

Caraballo has a big job ahead of her. She excitedly reports that undergraduate enrollment is at 2,700, up 33% from four years ago.

If you apply and are accepted to the Volgenau School, you will be given the support you need to stay and succeed.

She attributes this to an increase in adult students, a more national profile for Mason, and the reality that Volgenau School students get great jobs after graduation. Her job is to serve as recruiter to bring in top students from both high schools and community colleges, act as advisor for individual student issues, set policy, and work to keep the student retention rate high. And with 2,700 students and more each year, the job will only become bigger. She's well suited for it though with a

bright, approachable manner that can calm the most nervous freshman or senior battling financial concerns. She says she strives to make sure that students are more than files and numbers and that their concerns and personal stories are heard. She's quick to acknowledge the tremendous work of her assistant Susan Brionez who worked for Bernard White and who now is her source for all facets of the new role.

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Student Organization, AFCEA, Offers Scholarships and **Professional Opportunities**

olgenau School students have many student organizations to choose from, but not all organizations are created equal. The Armed Forces Communications and Electronics Association (AFCEA) offers students scholarships, professional development, and networking with some of the hottest technology leaders and companies in Northern Virginia. And

though Armed Forces is in the name, "you don't have to be a member of the armed forces to join, and there are many benefits to becoming a member of AFCEA-GMU," says Shavon Clanagan, the current AFCEA president and a systems engineering major. The group's mission is to promote

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New Face, from page 1 Undergraduate Success

One of the hallmarks of undergraduate education at the Volgenau School, says Caraballo, is that there is "no second gate to study a particular major." She explains that in some schools, students are only admitted to the university and then must apply to the program of their choice. If students don't qualify for the program they had been hoping for, they are lost without a major. That isn't the case at Mason.



Undergraduate Peer Advisors

Caraballo cites the importance of scholarships, even small amounts as life changing for students and credits corporate partners and private donors in making a difference in student retention and success.

If you apply and are accepted to the Volgenau School, you will be given the support you need to stay and succeed. Caraballo's role among many others is to coordinate that support. She cites the importance of scholarships, even small amounts, as life changing for students and credits corporate partners and private donors in making a difference in student retention and success.

The growing demands of both the student population and the increase in new undergraduate programs, such as the new bioengineering degree,

caused the department to take a new look at how undergraduate services were managed. Caraballo says her role is now more student focused. Two huge programs that fall under the student services umbrella, distance learning and the AFCEA scholarship program, are now being managed by Peggy Brouse and Andrew Loerch. Each has expertise in these programs and by working together can do more for students than Caraballo could alone.

Caraballo welcomes the ability to focus on the task ahead. She is a visible face on campus, speaking at events and checking in on classes during the start of a new semester. She no longer has time to teach but does see that as something she will do again in the future. She hasn't stepped out of the classroom completely as she serves as the faculty advisor to the Society of Women Engineers. Her second semester in her new role will soon begin and she's opening her door wide to all that she will find.

AFCEA, from page 1

industry-government cooperation in developing effective intelligence and information management, including the development, manufacture, and operation of equipment and systems, and provision of services in the fields of signals, communications, electronics, computers, intelligence systems, command and control, and imagery.

Andrew Loerch is the group's newly appointed faculty advisor. He explains that each semester, up to ten \$1,000 scholarships are awarded to Volgenau School students. The funding comes from the Northern Virginia AFCEA chapter, and the awards are given based on academic merit. Students don't have to be AFCEA members, but members are given preference when awards are considered. One of the bigger benefits to students, explains Loerch, is the professional networking. Each month AFCEA-NOVA hosts a networking luncheon, and student members are invited to attend free. The luncheons are well attended and put students directly in contact with employers looking to hire interns and full-time employees.

AFCEA also has a community service mission, and Clanagan explains, "Recently we've had members participate in the adopta-school program organized by AFCEA-NOVA. We judge science fairs and help students with projects. In the past, we have demonstrated our unmanned aerial vehicle (UAV) to children in grades K-12 at schools and the Smithsonian National Air and Space Museums where we try to promote interests in science, technology, engineering, and math.

AFCEA-GMU has regular luncheons and events and invites students to attend to learn more. Visit them online at www.gmu.edu/org/AFCEA/.

Program Spotlight

New Executive MS in Management of Secure Information Systems

Practical, relevant, and leading technological programs have always been a hallmark of the Volgenau School, and the newest master's program is leading the way. The Volgenau School has joined resources with the School of Management and the School of Public Policy to create an

innovative MS in Management of Secure Information Systems.

Daniel Menascé, Senior Associate Dean, **Professor of Computer** Science and program liaison, explained the genesis of this new degree and how it differs from the CS Department's existing technical MS ISA program. "We [the school] came to the conclusion that cyber security problems are not just technical problems but problems that affect enterprises and governments. In order for organizations, both public and private, to have proper cyber security protocols and plans

to keep systems safe, secure, and efficient, there need to be both technical and management solutions." This new degree combines the robust technology experience of the AIT, CS, and ECE departments with the depth and experience of modern-day management and public policy training found at the School of Management and School of Public Policy.

The CS department has other cross-university collaborations such as computer game design with the College of Visual and Performing Arts. However, this new Executive Masters was designed from the ground up taking into consideration real-world needs and demand, necessary steps for the program to

receive certification from

the State Council of
Higher Education for
Virginia (SCHEV).
Menascé explains,
"We took extensive
surveys to assess
demand and the
feedback from alumni
and area companies
was really high. We
also determined that
there were significant job

opportunities and growth with this degree."

Another important feature that sets this program apart from others across the nation is that this is a balanced program taught by twenty-eight full-time faculty across the three schools. Menascé says that this program is a "true collaboration between schools."

The program is ideal for students who have some experience in any of the program areas and who are looking for a broader education that will allow them to become CIOs, cyber security managers, and executives who know how to bridge the divide between the technical challenges of cyber security and the management and policies issues that guide them.

The new program is an Executive MS that follows a cohort program where students come to campus every Saturday, with one Saturday off after every three Saturdays, for 15 months and complete a one-week global residency. For more information visit online at: http://som.gmu.edu/msis.

Mason Goes the Distance For Education

nline, distance education is one of the fastest-growing trends in higher education. As students become more comfortable with online courses and the technology improves, more universities are developing online curriculums. The Volgenau School is no exception. Peggy Brouse, the new Commonwealth **Graduate Engineering Program** (CGEP) Director for the Volgenau School, points out that distance education has been around for many years and that the CGEP program, a collaborative distance education initiative involving George Mason University, the University of Virginia, Virginia Tech, Old Dominion University, and Virginia Commonwealth University has been around since 1998.



Peer advisor, Mariet Kurtz, University Scholar

The program allows students interested in a graduate engineering degree to take courses from all of the participating schools. They must meet enrollment requirements and they will ultimately receive their degree from their home university. However, the program allows them to build their program from any of the schools. Students attend lectures primarily using two-way digital

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Inside the Volgenau School

Volgenau School Welcomes Caitlin Harbold



Caitlin Harbold has joined the Development Team of the Volgenau School of Engineering. Caitlin will serve as the new Development Event Manager working to raise the school's social

media profile and manage events and branding.

Caitlin is a native of Baltimore and recently moved to Virginia.

Jennifer, Linda, and Pete are pleased to have her round out their team, along with their new assistant Meghan Blydenburgh.

Volgenau School Advisory Board Update

he Volgenau School's Advisory Board is entering its third year in helping the school move toward the top rank of engineering schools in the country. The Board's 15 at-large members are senior executives from Northern Virginia technology companies. These executives are joined by representatives from advisory boards serving the school's departments and research centers. The Board has established several working task forces. One effort reviewed the school's research programs and organization and made recommendations in key areas. Another obtained graduate assessments of the school's effectiveness in preparing students for work. A third began examining how intellectual property created at the school can be commercialized. These efforts will continue along with additional subjects by teams of board members

and school personnel.

One major new effort will be a regional symposium scheduled for April 2012 on the role of wireless communications in supporting emergency operations at the local, state and national levels. The symposium will bring together Volgenau School researchers, industry providers, users and policy officials to examine the many complex facets of this subject.

"Many of our Board members are investing substantial time and talent in support of the School," said Board Chair Charles Joyce. "We expect that the collaboration that is taking place will lead to productive partnerships between the School and the local technology community."

"This Board is a fantastic asset for the School," noted Dean Lloyd Griffiths, "and we are grateful for the commitment of so many corporate leaders to increasing the value of the Volgenau School of Engineering to the region." Distance, from page 3

videoconferencing technology. Most of the courses are taught simultaneously to students on-campus and at online conferencing sites.

Additionally, the Volgenau School has other distance education programs including a degree program for the Applied Information Technology Program and a Systems Engineering program that is being developed with the outside online education company Colloquy.

Brouse has been working to introduce online teaching to Volgenau faculty as well as providing training and online course development assistance. She recognizes the power that online teaching has to reach more students, especially working professionals seeking advanced engineering and technical degrees.

Alumni Corner

2nd Annual Alumni Dinner

On October 28, over fifty Volgenau School alumni gathered at the Mason Inn to a warm welcome and a wonderful dinner sponsored by Orchid Technologies & Management, a local IT services firm and long-time supporter of the Volgenau School. This annual dinner is becoming a must-attend event for Volgenau School alumni to meet and discuss ideas about the future direction of the school.

Our host this year was Hadi Rezazad, PhD '09, Chair of the Alumni Development Board, along with members of the Alumni Development Board. The event was designed to open the door for more active alumni participation in the school and in particular for alumni



Peter J. Farrell

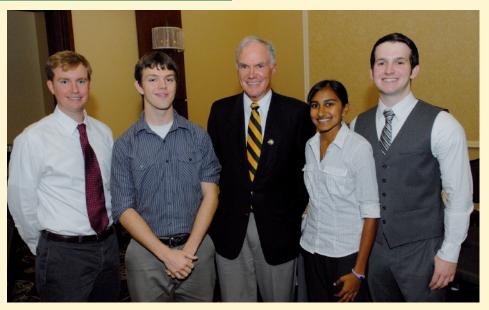
to find more ways to mentor students and serve as an entry point for students into the local business community.

You can gauge how successful and fun an event is by how long people stay to socialize after the formal program has ended. The Volgenau School alums were still there kicking around ideas to help our students and ideas on using social media well after the dinner ended. It is a unique networking event that allows Volgenau School alumni to stay involved in the school and the community and is already on the calendar for next fall.

Our next big event is a Volgenau School alumni and family tailgate party and beer tasting at the Mason Inn before the Mason versus Towson basketball game Saturday, January 21, 2012.

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Inside the Volgenau School



Outstanding Scholarship recipients with Dean Griffiths: from left to right: Brad Peterson, John Mooney, Lakshmi Meyyappan, Zach Nalbone

Best and Brightest Luncheon

n October 13, the Volgneau School hosted the annual Best and Brightest Luncheon at the Mason Inn. This event recognizes individuals and companies who support our scholars and it also honors the students who directly benefit from these generous donations. It was a great event with wonderful testimonies by our students and donors. These donors support more than 50 students at the Volgenau School with both endowed and unendowed scholarships. We are fortunate to receive and foster these relationships and we are excited to see what our students will accomplish with these opportunities.



Outstanding scholarship recipients: Ashiquillah Ateeq, Ranjeeta Paudel, Donor: Joan Mancuso, SSPI MidAtlantic Regional Chapter

Accolades

Faculty

Jeremy Allnutt published his third book, *Satellite-to-Ground Radiowave Propagation*, second edition. The book was published by the Institute of Engineering and Technology.

Mike Hieb (PI) and Mark Pullen (co-PI) received \$148,580 of additional funding from Northrop Grumman for their project "Common Ground Joint Capability Technical Demonstration." Anticipated total funding is \$2,001,939.

Dimitrios Ioannou received \$57,998 with an anticipated funding of \$181,588 from the National Institute of Standards and Technology for his project "Metrology of Spin/Interfere - State Interaction in Spin - Polarized Transport CMOS - like Silicon Devices." The performance period is August 1, 2011 through July 31, 2014.

Sushil Jajodia (PI), Brent Kang (co-PI) and Kun Sun (co-PI) received \$199,380 from the Army Research Office for their project "A Laboratory for Cyber Situation Awareness Using Heterogeneous Virtual Machine Replication." This award comes through the Center for Secure Information Systems. The performance period is October 1, 2011 through September 30, 2012. Jajodia also received \$167,024, with a 12month option amount of \$185,804, from the National Security Agency for his project "Information Assurance Scholarship Program." The initial budget period is August 17, 2011 through November 16, 2013.

Brent Kang received \$49,258 from the National Science Foundation for his project "Collaboration Research: Hands-on exercises on DETER Testbed for Security Education." This award comes through the Center continued on page 6 Accolades, from page 5

for Secure Information Systems. The performance period is December 1, 2010 through August 31, 2012.

Jana Kosecka received \$39,291 from the Army Research Office for her project "Acquiring Semantically Meaningful Models for Robotic Localization, Mapping and Target Recognition." Anticipated total funding is \$365,917. The performance period is August 13, 2011 through August 12, 2014.

Fei Li received \$69,872 from the National Science Foundation for his project "CCF:AF:EAGER:Integrating Chip Reliability in Designing Energy-Saving Scheduling Algorithms." The performance period is September 1, 2011 through August 31, 2012.

Qiliang Li received \$59,358 from the National Institute of Standards and Technology for his project "Tri Gate Nanowire FET Test Structures to Investigate Short Channel Effects and Ballistic Transport." Anticipated total funding is \$185,365 and the initial budget period is August 1, 2011 through July 31, 2012. Li also received a National Science Foundation CAREER award, the 2011 Mason Emerging Researcher/Scholar/ Creator Award, and is the PI/co-PI in a \$1.7 million research award.

Qiliang Li, Dimitris Ioannou, and former PhD students Yang Yang and Xiaoxiao Zhu received a U.S. patent on their nanowire field effect junction diode on August 2, 2011.

Qiliang Li (PI), Nathalia Peixoto (co-PI), Erhai Zhao (co-PI), Rob Cressman (co-PI), and Dimitrios Ioannou (co-PI) received \$251,950 from the National Science Foundation for their project "MRI: Acquisition of Electron Beam Evaporation System for Multidisciplinary Research and Education." The performance period is September 1, 2011 through August 31, 2013.

Jyh-Ming Lien received \$48,487 with an anticipated funding of \$384,666 from the University of Arizona for the project "FHWA/DOT/Advanced Research: VASTO Evolutionary Agent Systems for Transportation Outlook." The performance period is May 22, 2011 through March 31, 2012.

Andy Loerch won the 2011 Vance R. Wanner Memorial Award given by the Military Operations Research Society (MORS), an annual award granted to a military operations research professional who played a major role in strengthening the profession.

Sean Luke (co-PI) and Paul Schopf (co-PI), led by Cioffi-Revilla (PI), received \$1.68 million from the National Science Foundation for the project "KRASNOW: CDI Type II: Cyber-Enabled Understanding of Complexity in Socio-Ecological Systems via Computational Thinking." The performance period is September 1, 2011 through August 31, 2015.

Rao Mulpuri received \$180,000 from the Army Research Office for his project "High Performance, Extended Short Wavelength Infrared HgCdTe Materials and Detectors." The performance period is August 1, 2011 through July 31, 2013. He also received \$20,000 from the Army Research Office for his project "Ultra fast Microwave Annealing to Increase Acceptor Activation in in situ and ion implantation doped Zn0." The anticipated total funding for options 1–3 is \$240,000. The initial budget period is October 1, 2011 through November 30, 2011 with the anticipated option end date on September 30, 2014.

Nathalia Peixoto (PI) and Vasiliki Ikonomidou (co-PI) received \$125,000 from the National Science Foundation for their project "GARDE:EQuaLS:Enhancing Quality of Life of Students through Senior Designs." The performance period is January 1, 2012 through December 31, 2016.

Siddhartha Sikdar received three awards: the 2011 Mason Emerging Researcher/Scholar/Creator Award, a National Science Foundation CAREER award, and a National Institutes of Health Research Project Grant.

Bob Simon (PI) and Hakan Aydin (co-PI) received \$430,000 from the National Science Foundation for their project "CSR:Small:Energy Harvesting for Performance Sensitive Wireless Sensor Networks." The performance period is August 15, 2011 through July 31, 2014.

Bob Simon received \$137,690 from VECTARE for his project "Wireless Sensor Network Research." The period of performance is October 1, 2011 through September 30, 2012.

Angelos Stavrou (PI) and Anup Ghosh (co-PI) received \$205,983 from the Army Research Office for their project "A VPN Proxy Cloud for Detecting HTTP & VolP Malware." The performance period is August 8, 2011 through August 7, 2012. Stavrou received \$259,662 out of an expected \$511,323 from DARPA, through Aterrasys, for his project "Securing Android Mobile Devices." The performance period is August 26, 2011 through August 25, 2012. Stavrou also received \$100,000 from the National Institute of Standards and Technology for his project "Automated Tools and Methods for Testing of Network-enabled Mobile Applications." The performance period is September 1, 2011 through May 31, 2012. All three awards come through the Center for Secure Information Systems.

Anand Vidyashankar (PI) and Guoqing Diao (co-PI) received \$100,000 from the National Science Foundation for their project "Statistical Inference for Random continued on page 7

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Corporate Connections

CATSR and Senior Design Projects Exemplifies the Benefits of Partnership for Students, Companies, and Government

or students, faculty, and corporate partners, the Volgenau School's Center for Air Transportation Systems Research (CATSR) provides the perfect environment for research, collaboration, and development in systems engineering issues in air transportation.

CATSR is an FAA Center of Excellence and its resources hold significant value for government agencies like the Federal Aviation Administration (FAA) as it works under contract on analysis for several divisions including Air Traffic Operations, Policy, NextGen, System Operations, Data Communications, and Human Factors Research. Lance Sherry, director of CATSR says, "For NextGen, we design, build, and use simulations that fly 60,000 flights a day in the United States. We insert weather and see what the airlines do and how air traffic control responds. We insert new concepts of operations, new procedures, and new technologies and explore the unintended consequences."

CATSR also seeks to educate future systems engineers to analyze, manage, and solve the complex issues facing the air transportation industry. "Our partners are particularly delighted with students who can hit the ground running on the first day on the job," Sherry says. "With their skills from Mason classes, internships, and research opportunities, all our graduate students have received job offers before they graduate." Corporate partners, such as Metron Aviation have leveraged CATSR's unique research capabilities. Sherry says, "With Metron Aviation, we developed and tested algorithms



From left to right: Naseer Rashid, Cihan Yilmaz, Joel Hannah, Chris Saleh, Danielle Hettmann

to manage the flow of the traffic in the air on the airport surface." The research that Metron Aviation funded has now been incorporated into a product that uses these algorithm methodologies for airspace design configuration, resulting in more efficient air traffic control operations.

Real Projects, Real Outcomes

Senior Design projects throughout the entire Volgenau School provide another way for students, faculty, and corporate partners to collaborate on research. In these two-semester projects, students work in groups to apply their knowledge to a complex

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Accolades, from page 6

Recursive Equations." The performance period is August 1, 2011 through July 31, 2014. Vidyashankar has also just joined the Statistics department as a tenured associate professor.

Students

PhD IT student Chun-Kit Ngan received a Best Student Paper Award at the 14th International Conference on Enterprise Information Systems, in Beijing, China, for his paper "A Service Framework for Learning, Querying and Monitoring Multivariate Time Series," co-authored by Alexander Brodsky and Jessica Lin.

PhD IT student **Faisal Sibai** received a Best Paper Award at the SECUREWARE 2011 conference for his paper "A Scalable Architecture for Countering Network-Centric Insider Threats," co-authored by **Daniel Menascé**.

PhD CS student **Bo Zhang** and his co-advisors, **Bob Simon** and **Hakan Aydin**, received a Best Paper Award at the 14th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems in Miami, Florida, for their paper "Maximal Utility Rate Allocation for Energy Harvesting Wireless Sensor Networks."

Volgenau School Corporate Partners

Accenture; Aerospace; Beck Foundation; C5i; CACI; CGI; CSC; ENSCO,Inc.; Freddie Mac; General Dynamics - AIS; GTSI; Harris; Knowledge Consulting Group; Lockheed Martin; ManTech; Metron Aviation; Micron; Millennium Enterprise; MITRE; MTCSC; Noblis; Northrop Grumman; Raytheon; Segue Technologies,Inc.; the Si Organization; SRA,International; TASC; Telos; Vangent; Volkswagen Group of America; Widelity

To learn what career opportunities the Volgenau School corporate partners are offering, please follow this link to their individual corporate logos on our website at http://volgenau.gmu.edu/corporate_community_partners/corporate_ partners.php

Corporate Connections

CATSR, from page 7

real-world problem, many times sponsored by a corporate partner needing in-depth research and analysis assistance. During the first semester, students perform concept definition and requirements analysis and develop a project plan. During the second semester, students execute the project plan and conduct the design and tradeoff analysis. Recent Senior Design projects have analyzed and tackled issues in health care (a cost-benefit analysis of lifestyle modification programs), water quality (a computer model to uncover the most cost-effective way to improve two rivers), and airline fleet maintenance (a trade-off analysis of alternate aircraft maintenance approaches).

Senior design projects for CATSR have resulted in wide-reaching effects on anything from passenger experience and economic policy to safety mechanisms and security procedures. Sherry emphasizes the opportunities that these collaborative relationships have for students, faculty members, government agencies, and corporate partners. "Companies and agencies get the benefit of working with talented, promising new engineers on research that directly affects their work," notes Sherry. He continues, "Through CATSR, graduate students cut their teeth on real-world hard projects that answer the tough questions our industry partners face."

More and more industry partners are reaping the benefits of being closely aligned with the Volgenau School in terms of linking recruitment and program support. The partnership creates a win-win for both the company and our School.

General Dynamics – Advanced Information Systems

We are consistently impressed with the students who have participated in parttime internships or became full-time entry-level employees.

Harris Corporation

Our corporate partnership has provided us with the means to have a near-constant presence on campus and involvement with students and faculty has provided us with unparalleled access to established and emerging thought leaders.

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We appreciate the one point of contact at the School as well as invitations to Dean's Advisory Board symposiums, faculty lectures and seminars, advance invitations to Engineers Day/career fairs to name a few and we appreciate seeing the CSC logo prominently displayed in the entrance to the Engineering School.

The Volgenau School Welcomes Our New Corporate Partner The Si Organization



The Si is a leading provider of full life-cycle, mission-focused systems engineering and integration services to the U.S. intelligence community,

Department of Defense, and other agencies. "The Si Organization shares in the same foundation of research and knowledge as the Volgenau School of Engineering, and our customers value the technical capabilities. We are excited and look forward to forging a long-term relationship with the Volgenau School students and faculty," says Marshall Keith, Vice President.

The Si is delving into this new partnership with great results. There are currently fifty-seven Mason alums working for the company and there is an active internship program. Additionally says Keith, "We are working closely with a senior capstone class to provide them potential real-world challenges to analyze." The Si feels the partnership benefits the company by "having the ability to access students for recruiting and educational purposes. The partnership benefits the school by having the ability to access industry professionals to ensure that course and degree curriculum translates to the professional level." The company sees the school as a strong partner due to its technical reputation and recommendations from recent graduates currently working at the company. This is an opportunity for the Si to "have a direct influence on developing the next generation of engineers and leaders for the intelligence and Department of Defense industries."

Keith wants students to know that the company places a high value on its employees and their education with a strong tuition reimbursement program, reimbursement for professional certifications, mentorship, and career development programs. He says, "It's an exciting time to join the company because you have the opportunity to help us shape our future."

You can learn more about The Si at www.the-si.com.

Corporate Connections

Volgenau School Welcomes New Corporate Partner and Tenant, Millennium Enterprise Corporation

he Volgenau School corporate partner program offers companies a way to connect and support students, faculty, and research opportunities. In addition, the school's new home, the Long and Kimmy Nguyen Engineering Building, was built to accommodate private companies looking for state-of-the art office space and a way to form deeper connections with the school. One such company, Millennium Enterprise Corporation, a software development and infrastructure hosting company, has joined the corporate partner program and leased office space.

For Millennium, one of the biggest advantages of being on campus is having access to the students. Finding quality employees is a challenge for many companies, so being able to work directly with the students gives Millennium the first chance to grab upcoming talent.

Millennium president and CEO, Minh Nguyen, sees the company's presence on campus as a way of giving back to the community. His company offers students paid internships, but he makes it clear that candidates should not expect to be tasked with bringing anyone coffee.

"We offer students opportunities to work on real, live projects," says Nguyen. "The students are actual critical components on projects with high visibility. I don't look at them as interns. I look at them as employees, treat them as such, and make them work hard."

Millennium has a successful history of hiring Mason students, and the company wanted to find a way to



keep the students during the school year without burdening them with the long commute to their office. With the available office space in the Volgenau School building, the solution was simple. Now with their new location on campus, Millennium looks forward to bringing on more students to their team and collaborating with the school.

Millennium also offers a scholarship program that exemplifies the company's passion in cultivating young talent—something it sees as a mutual benefit for both the company and students. When it developed the scholarship, Millennium made a commitment to Mason that provided students with more than just financial assistance, but also invaluable experience.

"I've been successful because I had great mentorship and learned a lot from successful company leaders. I think that's what students need, and that is what our company can provide them," says Nguyen.

Trapollo, LLC, Partners with George Mason University Bioengineering Department

he Volgenau School is pleased to announce a new partnership with Herndon, Virginia-based Trapollo, LLC, a healthcare services company working to deploy large scale telehealth monitoring technology, and the Bioengineering Department to develop novel biomedical

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MARK YOUR CALENDAR

Start Your Spring Recruitment Early!

ENGINEERS DAY

Thursday, February 2, 2012 12:00 to 6:00 pm Johnson Center, Dewberry Hall Who attends?

- 40+ companies showcase their latest technological advances and recruit our top students
- Students from the school's 7 engineering majors
- Over 24 active Volgenau School student clubs, 7 Academic Departments and 7 Research Centers showcase their work in gaming, simulation, and other areas of science, technology and engineering.

The event is sold out each year. Sign up early.

A recruiting booth is one of the benefits of membership in the Corporate Partnership program. Not a member yet? You can reserve a space for \$500.

For questions or to register your company, contact Caitlin Harbold, Development Events Manager for the Volgenau School at 703-993-6160 or charbold@gmu.edu.



The Last Word



ne of the hallmarks of the Volgenau School is that we continually strive to improve our programs and offerings. Our objective is to meet the needs of our students and our corporate community.

We began this school year by announcing Sharon Caraballo as our new Associate Dean for Undergraduate Programs. We also announced an exciting new Executive MS in Management of Secure Information Systems in close collaboration with our colleagues in the School of Management and School of Public Policy. This spring, we'll be hosting our 2nd Technology Symposium with a focus on the critical issue of emergency preparedness. This meeting will bring together both thought leaders and policy makers to discuss important issues and creative ideas for approaching them. This past season has shown us that in addition to concerns about national security, we in the Washington, D.C., metro area have to protect our infrastructure from disruption during torrential rains and earthquakes. I thought I left these types of problems behind when I moved out of Southern California.

We are well structured in our School to deal with these issues. Research programs in departments such as Civil, Environmental, and Infrastructure Engineering (CEIE); Systems Engineering and Operations Research (SEOR); and our Center for Secure Information Systems (CSIS) are developing tools and techniques that address the many complex issues relating to our safety and our future.

Results discussed at the Technology Symposium will lead directly to the incorporation of new ideas into our academic and research programs. We will continue to be a force for change. Our graduates will carry their knowledge into the community and will strengthen our critical infrastructures. Much of what we do is made possible through our growing corporate partnerships that provide essential student scholarship money, internships, and jobs to our graduates. So while our community bends to both the natural elements and the great national security threats, the Volgenau School stands as a constant where change can be managed and discussed.

> Lloyd J. Griffiths Dean

Trapollo, from page 9 monitoring technology.

The technology under development will enable high-resolution thermal imaging of tissue to aid in home management of at-risk patients. The Bioengineering Department, the school's newest department, is supporting senior undergraduate design teams to utilize tools and concepts in engineering to solve problems in biomedicine. Through this partnership, students will gain invaluable experience in collaborating with the private biomedical technology sector while making significant contributions that have the potential to improve health care delivery for citizens of Virginia and the nation.

You can learn more about Trapollo online at www.trapollo.com and the Bioengineering Department at http://bioengineering.gmu.edu.

Volgenau School News

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