

## IT Professionals Gather to Study Strategies for Security

by Lois Stephens

Recognizing the best defense for the stealth tactics of hackers is preparedness, 250 information technology specialists from colleges and universities across the country recently gathered to learn more about how to protect their vital information assets.

*Hacker Techniques, Exploits, and Incident Handling* was the topic of the March 6-11 Internet Security Training Workshop. Sponsored by Virginia Tech and the SANS (SysAdmin, Audit, Network, Security) Institute, the course kicked off with **President Charles Steger** welcoming the group to the university.

The training helped participants understand attackers' tactics and strategies and provided hands-on experience in finding vulnerabilities and discovering intrusions. A comprehensive incident handling plan and in-depth information also helped them prepare to turn the tables on computer attackers.

The workshop addressed the latest cutting-edge insidious attack vectors and the "oldie-



More than 250 information technology specialists from colleges and universities across the country gathered in March in Torgersen Hall for the Internet Security Training Workshop.

but-goodie" attacks that are still prevalent, and everything in between. Sessions included a time-tested, step-by-step process for responding to computer incidents, a detailed description of how attackers undermine systems so IT specialists can prepare, detect, and respond to them, and a hands-on workshop for discovering holes of vulnerability.

The legal issues associated with responding to computer attacks—including employee monitoring, working with law enforcement, and handling evidence—were also included.

*"This year, more than 3,200 people from universities and other educational institutions all over the U.S. will get high quality training in cybersecurity because of an innovative program first conceived and pioneered at Virginia Tech."*

"Virginia Tech was the first school to offer a complete SANS Global Information Assurance Certification (GIAC) track for higher ed, community colleges, or K-12 schools," said **Randy Marchany**, director of Virginia Tech's IT security lab and coordinator of the workshop. "Other educational institutions have started to offer full week SANS courses, but Virginia Tech is able to host the largest classes because of the superb infrastructure and conference group we have," he reported.

**Alan Paller**, director of research for the SANS Institute, praised Virginia Tech for taking the lead in the area of IT security training. "This year, more than 3,200 people from universities and other educational institutions all over the U.S. will get high quality training in cybersecurity because of an innovative program first conceived and pioneered at Virginia Tech. Their innovation radically lowers the cost of immersion cybersecurity education by bringing together large numbers of security ▶▶3

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# All Write @ Virginia Tech Inspires Young Authors

by Susan Felker

Imagine 85 students from eight to 18 years of age converging on the Virginia Tech campus in Blacksburg each morning for a week to work on self-expression through writing. This was the dream of the Department of English chair, **Lucinda Roy**, who worked with instructor **Aileen Murphy**, eight other faculty members, and graduate student **Ennis McCrery** to organize and teach classes for the camp.

“All Write @ Virginia Tech” brought that dream to fruition last year and was so successful that the English department will offer the camp again from **June 26-30**, expanding it to include up to 150 elementary, middle, and high school students. Last year the camp was open to Montgomery

County students, but this year enrollments will include aspiring writers from surrounding counties.

Each day begins with a two-hour writing workshop on poetry, fiction, and non-fiction taught by a Virginia Tech faculty member who is assisted by an intern or volunteer English major.

Last year, a special program on opening day featured poet, 2003 Grammy finalist, and University Distinguished Professor **Nikki Giovanni** as keynote speaker.

For the next three days, the students spent the last hour before noon adjournment in a different specialty writing class each day. “These classes were led by English department

faculty members who chose themes based on their personal interests,” Murphy says. “One faculty member brought a dulcimer, another focused on art. Birds, photography, collages, and film (how to tell a story without words) gave students a lot to think and write about. Lucinda Roy had students do chorale poetry, which they recited and sang.”

The last day of camp, students assembled with their parents and read their works aloud so their families could appreciate what these youngsters had achieved. The Department of English also created a special online anthology for the students so they could see their work on the Internet and share it with their families.

No student was turned away because of inability to pay the \$185 registration fee. “It’s very important to us that every child who wants to come will be able to participate,” explains Murphy. “Last year, faculty and community members donated scholarships for four children. Since we are expanding the number of students this year, we hope more people will donate scholarships.”

For additional information, to register for this year’s camp, or to underwrite a scholarship, go to the workshop’s website at [www.conted.vt.edu/awvt/](http://www.conted.vt.edu/awvt/). Changes this year include expansion of the enrollment area and smaller assemblies for parents and students the last day of class. ■

## Econometrics Program for South Korean Students Celebrates Fifth Anniversary

**Aris Spanos** (*front, center*), Wilson Schmidt Chair of the Department of Economics in the College of Science, and **Kyung Baik** (*center, left*), visiting scholar from Sungkyunkwan University in South Korea, are shown with students of the Applied Econometrics Short Course that was held on campus January 14 – February 12. For the fifth year, the program enabled Korean economics students to come to Virginia

Tech for one month of intensive study. Spanos was the College of Science’s recipient of the 2005 Award for Outreach Excellence for his efforts in developing and directing the graduate education program with Sungkyunkwan University. For more information about next year’s program, contact **Kris Peter**, assistant director in Continuing and Professional Education, at [kkpeter@vt.edu](mailto:kkpeter@vt.edu). ■



## IT Professionals

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practitioners from dozens of universities and schools, providing low-cost housing and food, and by providing proctors to enable students to have hands-on support, and most importantly, by persuading SANS to cut the cost per student by as much as 75 percent” said Paller.

The instructor for the course was **Ed Skoudis**, founder and senior security consultant with Intelguardians, a Washington, D.C.-based information security consulting firm.

“The class was great,” said **Patricia Vendt**, a participant from Wright State University in Dayton, OH. “Ed Skoudis was simply amazing...he added to the class with his ‘crack the hacker’ challenges and by drawing analogies that were totally appropriate for the audience.”

**Aras “Russ” Memisyazici**, IT/development specialist for Outreach Technology Services, also found the course to be outstanding. “The instructor gets down to the nitty gritty of the tools and gives you full, real-life strategies for defense. He definitely opened my eyes about general misconceptions in the IT world today.”

For more information about next year’s workshop, contact **Randy Marchany** at [marchany@vt.edu](mailto:marchany@vt.edu), or **Alice Clawson** in Continuing and Professional Education at [aliceb@vt.edu](mailto:aliceb@vt.edu). ■

# Autism Spectrum Disorders Conference Held in Abingdon

by Jane Todd

The Virginia Department of Education’s Training and Technical Assistance Center at Virginia Tech was the sponsor of the Autism Spectrum Disorders Conference recently held at the Southwest Virginia Higher Education Center in Abingdon. The March 30-31 program was attended by more than 300 educators, psychologists, parents, speech pathologists, paraprofessionals, and students.

**Anne Donnellan**, Ph.D., professor in the School of Leadership and Education Studies at the University of San Diego and Professor Emerita at the University of Wisconsin-Madison and **Martha Leary**, M.A., CCC-SLP, a speech pathologist and communication consultant, were joint presenters for the full-day session, *Myths and Assumptions: What we know about people with a label of autism*.

**David Pitonyak**, an independent consultant with more than 20 years of experience in supporting individuals who exhibit difficult behaviors, including supporting the needs of friends, family and caregivers, was the keynote presenter on the

second day. His presentation, *What Do I Do Next? Strategies for getting started after the conference is finished*, energized the audience with new ideas they could take back to work and daily life.

This session was followed with opportunities to choose three breakout sessions covering the broad areas of social skills, communication, and teaching strategies.

This conference, held for the third year, is designed for those who are supporting students from preschool through high school with autism, Asperger, or PDD-NOS, and meets a need in the southwest Virginia area. Parents and professionals alike continue to voice their enthusiasm and appreciation for bringing this specialized conference to far southwestern Virginia.

The mission of the Training and Technical Assistance Center (T/TAC) is to improve educational opportunities and contribute to the success of children and youth with disabilities (birth–22 years). The center provides quality training and technical assistance in response to local, regional, and state needs.

T/TAC services increase the capacity of schools, school personnel, service providers, and families to meet needs of children and youth.

The Training and Technical Assistance Center for Professionals Serving Students with Disabilities at Virginia Tech and Radford University is part of a statewide technical assistance program based at university sites across Virginia. The T/TACs, funded through a grant by the Virginia Department of Education, provide services to teachers, administrators, and others requesting assistance for their students in special education. Consultations, workshops, information, and referrals are provided free of charge.

If you would like more information about T/TAC programs, please contact **Diann Eaton** at [dveaton@vt.edu](mailto:dveaton@vt.edu) or **Mickey Vanderwerker** at [mickeyV@vt.edu](mailto:mickeyV@vt.edu). ■

# Student Leaders Collaborate With English Language Institute Students Through Service Learning Partnership



*Pizza, conversation, music, and friendship circles drew students closer together, as did learning greetings in several languages including English, Arabic, Korean, Spanish, and Chinese. Games and a snowball fight completed the event, and left everyone with a greater appreciation of the variety and similarities in global cultures.*

A snowy day could not keep students away from the party held on February 12 at the English Language Institute (ELI). Virginia Tech students in the Residential Leadership Community (RLC) socialized with ELI students for the purpose of mutual cultural and language learning, and to meet conversation partners from a variety of nations. The project is a collaboration of the

Service Learning Center, directed by **Michele Deramo**, the RLC, directed by **Denise Trudeau**, and the ELI, headed by **Judy Snoke**. The two participating RLC classes are taught by **Kathleen Arceneaux**. ■

# Basic Math and Sciences Training Manual Developed for Waterworks Operators

The Virginia Department of Health's Office of Drinking Water (ODW) is the primary agency for the administration of the Safe Drinking Water Act (SDWA). In 1999, the Environmental Protection Agency (EPA) produced federal operator certification guidelines in accordance with SDWA amendments. These

provide states with the minimum standards for the development, implementation, and enforcement of operator certification programs for all public water systems.

In keeping with these guidelines, ODW assists operators in meeting their training and certification needs. ODW hopes that the development of user-friendly

information resources will help provide waterworks operators a variety of training options. As a result, ODW has contracted with Virginia Tech to develop the "Basic Math and Sciences Training Manual for Waterworks Operators."

The initial step in the development process was the

formation of an advisory committee to identify the topics and respective experts in the field who may serve as "authors." The committee met at The Inn at Virginia Tech and Skelton Conference Center in January to begin the process. The manual will be completed in September 2006. ■



*Representatives from the Virginia Department of Health's Office of Drinking Water, Virginia Rural Water Association, Outreach Program Development, and the College of Engineering gather on campus to begin the development of a math and sciences training manual for waterworks operators.*

# Talent Search & Upward Bound Funding In Peril

For the past four decades, the TRIO programs, of which Talent Search and Upward Bound are a part, have helped prepare low-income and potential first-generation students for college. Ninety-four percent of Spring 2005 graduating seniors in the Virginia Tech Upward Bound program enrolled in college for Fall 2005. For the Talent Search program, that figure stands at 78 percent. According to figures from the Department of Education, only 41 percent of students similarly situated economically, but who do not receive the enrichment programs, enroll in college.

**Thomas G. Wilson**, director of Talent Search and Upward Bound at Virginia Tech, stated, "We have been lucky that in the area served by our programs—Congressman Rick Boucher and Congressman Virgil Goode have been strong supporters of

TRIO. Senator John Warner has been as well. However, this situation is very scary. Despite the fact that these programs are successful, they are still under attack by the administration."

*Ninety-four percent of Spring 2005 graduating seniors in the Virginia Tech Upward Bound program enrolled in college for Fall 2005.*

He continued, "If the entire TRIO community does not come together this year and work with Congress, the programs may be lost forever. According to the Council for Opportunity in Education, approximately one-third of all low-income students who graduated from high school and enrolled in college have been served by a TRIO program."

**Beverly Henry Wheeler**, president of the National Association for College Admission Counseling stated, "On the heels of the \$12 billion cuts to the student loan programs, this budget would deal a very serious

blow to college access for low-income students. Without greater college preparation, advising, and access overall, the increased student participation in high-need academic and career areas such as science, math, and technology will not occur.

For more information, please contact the Upward Bound and Talent Search programs at Virginia Tech at 540/231-6911.

## Bond and Crizer Join The Inn at Virginia Tech and Skelton Conference Center

The Inn at Virginia Tech and Skelton Conference Center welcomes the arrival of **Laurie Bond** and **Gary Crizer**. Bond began her duties as the university sales manager in December and Crizer was named assistant general manager in March. Both formerly worked at The Hotel Roanoke and Conference Center, where Bond was university sales manager and Crizer was the director of sales and marketing. ■



## Inside OPD

### Welcome to...



**Emily Cuykendall**, Senior program coordinator in the National Capital Region



**Megan Fisher**, Contract and database coordinator in Continuing and Professional Education



**Aras "Russ" Memisyazici**, IT/development specialist for Outreach Technology Services

### Congratulations to...



**Gilda Machin-Scarpaci**, of Continuing and Professional Education, who has been promoted to full-time program coordinator

# National Capital Region Hosts International Truck and Bus Safety Symposium

More than 180 researchers, policy makers, and business leaders gathered in Alexandria, Virginia in November for the International Truck and Bus Safety and Security Symposium. This three-day, bi-annual conference is dedicated to presenting selected research papers from around the world. As an integral part of the steering committee, Virginia Tech Outreach Program Development assisted with planning, marketing, and delivering this event.

The symposium is a collaborative venture between the Virginia Tech Transportation Institute (VTTI) and the National Safety Council (NSC). VTTI is responsible for issuing the call for papers, coordinating review of papers, and handling the details of the presentations. NSC is responsible for assembling

the steering committee and coordinating the event's announcement, registration, and program planning.

Eighty papers were presented at the symposium, addressing six focus areas: driver health, training and performance, fleet management, technology and design, enforcement and compliance, and a new category added since 9/11: security. In and out of the formal sessions, animated discussions considered how to disseminate useful information, how to effectively implement technologies and strategies demonstrated in the research, and what further questions researchers need to investigate.

"Truck and bus safety is interesting because it involves so many different disciplines—management, human factors,

technology, economics, statistics, and law enforcement.

Commercial transportation in the U.S. is a \$600 billion industry that employs more than 10 million people and delivers more than 80% of goods to the public. It is also a major area of research and development funding for Virginia Tech," said **Ron Knipling**, senior research scientist at the Virginia Tech Transportation Institute and co-chair of the 2005 International Truck and Bus Safety and Security Symposium.

Sponsors of the symposium included the Federal Motor Carrier Safety Administration, Transportation Security Agency, National Highway Traffic Safety Administration, American Truck Associations, Transport Canada, American Bus Association, National Institute

for Occupational Safety and Health, Cadec Corporation, Intec Video Systems, and the Commercial Vehicle Safety Alliance. The transportation Research Board was a co-sponsor.

**Lester Sokolowski** of the National Safety Council expressed his gratitude to Virginia Tech for co-sponsoring the event. "The symposium's success was a direct byproduct of the professionalism, commitment to safety, hard work, and dedication to detail that was exhibited daily by the Virginia Tech staff. We're looking forward to working with them on future initiatives," he reported. ■



This newsletter is published quarterly by Outreach Program Development, 702 University City Boulevard, Virginia Tech, Mail Code 0272, Blacksburg, Virginia 24061.

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## Outreach Program Development

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