

## READY, SET, SECURE...

The Competition Industry Advisory Board, along with the State Directors, has the Collegiate Cyber Defense Competitions (CCDC) ready for the big days to come.

The top winner from each state competition will compete in the Midwest Regional CCDC on March 16-17 at Moraine Valley Community College.

The winner of the Midwest CCDC will proceed to the National CCDC taking place April 20-22 in San Antonio, Texas.

## Top security candidates ready for job recruiting

The modern-day demand of continual technology advancement is what started the Collegiate Cyber Defense Competitions (CCDC). Participation gives each student an advantage in the workforce with job recruitment being an important outcome. All participants of the Midwest Regional CCDC held at Moraine Valley Community College, Palos Hills, Ill., on March 16-17, will have their resumes ready to discuss career options with businesses ready for recruiting. Businesses are welcome to observe and interview these top cyber-tech students. Please contact Lynn Dohm at [lynn.dohm@morainevalley.edu](mailto:lynn.dohm@morainevalley.edu).

## Cyber exercise and competitions industry advisory board for 2012 competitions

The Competitions Industry Advisory Board (CIAB) consists of national leaders in the fields of information assurance, IT security, cybercrime, computer forensics, evaluation and education to help CSSIA achieve another successful year of cyber competitions.



David Durkee (Chair)

Alan Greenberg, Boeing

Bob Schoenherr, Cisco

Bob Thomas, Department of Homeland Security, FEMA

Bruce Lindberg, Center for Strategic Information Technology and Security

Doug Huber, Loraine County Community College

Frank Frydrch, Secure Works

Greg Pangrazi, Huron Consulting Group

Ken Rowe, University of Illinois

James Lewis, Washtenaw Community College

Michael Davis, Savid Technologies, Inc.

Rudy Ristich, Secure Works

Steve Fall, Polk Community College

Tim Flug, Inver Hills Community College

MWCCDC on facebook & twitter



# High school cyber security competitions



Illinois

Florida

NEW YORK

Washington, D.C.

CSSIA's High School Cyber Security Competitions (HSCSC) are underway for 2012. John Sands, co-principal investigator for CSSIA and director of HSCSC, has been hosting high school faculty development workshops to assist schools with the dissemination process of having their own competitions. There will be a series of four competitions held virtually using CSSIA's Virtualization Data Center (CVDC), utilizing the CNSS 4011 labs.

Illinois, Florida, New York and Washington D.C. high school faculty have been preparing their students for the problem-solving, critical thinking and teamwork skills that are needed to compete in this type of competition. CSSIA has provided training along with tools on the website and the CVDC. The winning teams from these four states will compete for a final competition April 13, 2012.

For more information, visit [compete.morainevalley.edu](http://compete.morainevalley.edu).

## State Farm awards UIS Computer Science department \$50,000 grant



State Farm Companies Foundation has awarded the University of Illinois Springfield Computer Science Department a \$50,000 grant to enhance the State Farm Virtual Computing Teaching and Learning Laboratory at UIS.

“The existing virtual server system does not have sufficient storage, memory or remote access to support the increased demand placed on it by the increase in majors taking courses that use the system,” said Ted Mims, chair of the UIS Computer Science Department.

The funding provided by State Farm will allow the department to add a new front-end remote access system, increase the

server memory of each processor, and add a new storage system that is supported by the newer versions of virtual software.

“These improvements provide greater efficiency and effectiveness for students when the Department moves core and elective courses to a virtual environment. It will provide enhanced remote access, expanded and streamlined online learning,” said Mims.

University of Illinois Vice President and UIS Chancellor Susan J. Koch accepted the check from State Farm during a reception in the Public Affairs Center in November 2011. It's estimated there are currently more than 140 UIS graduates working for State Farm at its corporate headquarters in Bloomington, Ill.

The new system will be used by the UIS National Resource Center for Systems Security and Information Assurance to host programming, cyber defense and digital forensics competitions. The UIS Computer Science Department is a partner in the National Center for Systems Security and Information Assurance funded by a National Science Foundation (NSF) Advanced Technology Education (ATE) Grant. Funding from the NSF/ATE grant will be used for events at UIS that utilize the equipment funded by the State Farm grant.

## Moraine Valley receives technology grant

Moraine Valley Community College is about to undertake a massive project, one that will take technological learning to a new level and help students develop into high-technology professionals thanks to a \$3.7 million grant. But it's not that simple.

The college is part of the National Information, Security, and Geospatial Technology Consortium (NISGTC), a syndicate of seven community colleges (and 19 affiliated colleges) composed of National Science Foundation Advanced Technological Education Centers. This consortium recently received roughly \$20 million for job training and workforce development in the Information Technology industry. Moraine Valley will be the lead college for cybersecurity and virtual labs.

Each college is responsible for a specific assignment within the entire project that is supposed to take three years, said Erich Spengler, who is Moraine Valley's project director in addition to director and principal investigator of the National Resource Center for Systems Security and Information Assurance (CSSIA) and Moraine Valley professor of computer integrated technologies. "This has the potential to be one of the largest paradigm shifts in high technology education. It could transform the way many schools teach and the way students learn," he said. "The outcome is that students will have well developed workforce skills looked for by employers."

Moraine Valley was tapped because of its research and development of the CSSIA virtualization labs and overall work with CSSIA. The college's task involves several parts. One is to revise and develop a new and current cybersecurity degree and certificate program with a focus on "stackable" certificates. Every time students get a related certificate, it shows that they have earned additional skills to make them more viable to enter the workforce. The other colleges in the consortium will then adopt this program.

Another major function Moraine Valley will tackle is to help build virtual data centers at each of the other six colleges in the group. With Moraine Valley as the model and virtualization data center architect, the other colleges will ultimately implement some or all the technology-based programs being developed through this project. This learning environment would be available 24/7, Spengler said.

A third major objective is integrating hands-on virtual lab content for all these developed programs at the data centers. For example, when consortium partner Del Mar College in Texas sends Moraine Valley all their lab content for the geospatial program, Moraine Valley will work with its partners to transform the information into its data center which will then distribute it to the other six college data centers. The program then maintains consistency and can be updated across the board.

In addition, Moraine Valley also will update the output from the other colleges in the group, which includes new certificate programs such as geospatial technology.

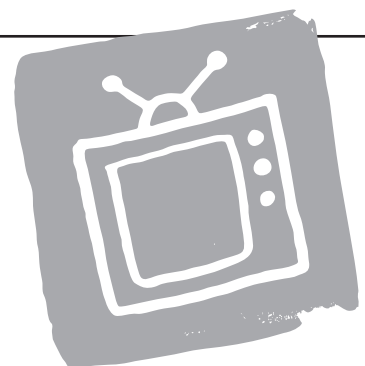
## CSSIA welcomes national visitation committee

The National Visitation Committee will meet March 28-30 in Palos Hills, Ill., to discuss and establish its yearly criteria for CSSIA's objectives and goals. The committee includes:

- Dr. Barbara Belon, Colloquium for Information Systems Security Education
- Bob Schoenherr, Cisco Systems and Aries Technology
- Carol Sledge, Carnegie Mellon University
- Don Goff, CStar Systems
- Ron Dodge, United States Military Academy
- Daniel Manson, Cal State University Pomona
- Bob Thomas, Department of Homeland Security
- James Jones, City College of San Francisco
- Mario Mediati, Honolulu Community College
- Alan Greenberg, Security Professional
- Clydene Stagvik, Cisco Academy Area Manager (retired)
- Ronald Kovac, Ball State University
- Ken Rowe, University of Illinois

## Wisconsin grant allows free courses

The Madison Area Technical College (MATC) in partnership with CSSIA was awarded a \$30,000 grant from the Wisconsin Technical College System to support MATC's professional development courses this summer.



### CSSIA's YouTube

Can't get enough of CSSIA?  
[www.youtube.com/user/CSSIAdotORG](http://www.youtube.com/user/CSSIAdotORG)



# National Cyber League

The National Cyber League (NCL) was founded in May 2011 in a collaborative effort of National Resource Center for Systems Security and Information Assurance, Cyberwatch, Cyberwatch West and Mid-Pacific ICT Center. The goal of NCL is to provide a training ground for undergraduate and graduate students to practice and hone their cyber security skills through combined individual and team exercises.

The NCL is hoping to fill the void from the current cyber exercise landscape by providing a regular season that allows both the individual and student teams to practice cyber security in a safe, yet challenging environment. Participants of the NCL are able to practice and compete year-round in various cyber exercises, in addition to the one-off “playoff” systems that currently exist.

The NCL is committed to creating the most educational, challenging, and entertaining cyber competitions possible. This is accomplished by:

- Providing an inclusive individual and team competitive sport experience
- Creating a fun, experiential learning opportunity where students demonstrate skills/knowledge sets
- Promoting proficiency for specific cyber skills
- Preparing teams for other cyber exercises, such as the Cyber Patriot, Digital Forensics Challenge, National Collegiate Cyber Defense Competition
- Continuing the acquisition of skills tied to curriculum, industry needs, and professional certifications
- Enriching the classroom learning experience
- Promoting industry participation
- Addressing the lack of qualified cyber security professionals nationally
- Aligning exercises to academic calendar (e.g., semesters)
- Providing a mechanism by which schools/students can assess the effectiveness of their curriculum

To learn more, visit <http://nationalcyberleague.org>.

# Forensics



From left: students Robert Lipscomb from Southwestern Illinois College, Johnathan Nuttal from University of Illinois Springfield and Guillermo Rangel from Moraine Valley Community College.

Nearly 50 participants assembled from around the state of Illinois for the second annual Illinois Collegiate Competition. This year’s theme was a Digital Forensic Challenge, hosted by CSSIA in partnership with the UIS Computer Science Department and InfraGard, an initiative of the FBI dedicated to increasing the security of US critical infrastructures. Students from more than a dozen schools gathered on the UIS campus in November 2011 to explore computer forensics through exercises targeting introductory forensics skills. A hands-on academic lesson kicked off the event. Professionals in the forensic field served as mentors who worked individually with each team throughout the morning. The afternoon was dedicated to a team-based competition engaging the next generation of computing professionals in a digital forensic scenario. The competition culminated with each team submitting a report to a team of judges and presenting digital evidence as though in a courtroom setting. Feedback from student and mentor participants alike was excellent, and we hope to repeat the event next year.

## Conference: increased dependence on computers and implications of IT

UIS Computer Science Department, InfraGard and the National Resource Center for Systems Security and Information Assurance will be hosting the Annual Cyber Defense and Disaster Recovery Conference on March 9. The conference’s main focus is to look at the increased dependence on computers and the implications of it. Chief of Security for General Motors, Rod J. Kinghorn, will be the keynote speaker and promises to give attendees a peek at the automotive future in his presentation, “Your Automobile – The Rolling Computer: Risks and Rewards”. In addition to a wide variety of speakers, there

will be SANS hands-on interactive presentations on persistent threat management as well as speakers on virtual cloud, voting machine fraud and more.

Last year’s theme on cyber defense was Securing the Human, and attendance was the highest ever with more than 240 gathering to listen to over a dozen guest speakers. Janis Rose, Cyber Defense and Disaster Recovery Conference chair, has high hopes of breaking the attendance record for 2012. For more information, contact Janis Rose at [jrose2@uis.edu](mailto:jrose2@uis.edu).



# Magazine gives two UIS online grad programs high marks

A first-time survey of national online programs by *U.S. News & World Report* gives high marks to the University of Illinois Springfield's online graduate degree programs in computer science and management information systems.

The magazine said it undertook the project to begin filling an information gap about the strengths and weaknesses of online programs. U.S. News ranked 196 online bachelor's degree programs and 523 online master's degree programs in business, engineering, nursing, education, and computer information technology. Programs considered for the rankings needed to have at least 80 percent of their course content available online.

Overall, the UIS computer science master's program ranked 8th in the nation for "Student Service and Technology" and 21st for "Teaching Practices & Student Engagement" in the computer information technology category. The Illinois Institute of Technology in Chicago was 20th in the category.

UIS's management information systems program ranked 27th best for "Teaching Practices and Student Engage-

ment" and 49th best for "Student Services & Technology" in the Business category.

"It is gratifying to see UIS recognized once again for outstanding faculty members and quality practices among the many accredited U.S. colleges and universities offering online degree programs," said Ray Schroeder, UIS associate vice chancellor for online learning. "This report is a reflection of the supportive online environment at UIS."

The online computer science master's program at UIS focuses on software and is geared toward students interested in design, analysis and implementation of software programs. Of the 275 current computer science graduate students, 146 are online students.

The management information systems program focuses on providing a balance between technical skills and knowledge of business functions and processes. Seventy-five percent of the 190 students currently enrolled in that program at UIS are online students.

## Train-the-trainer

The National Resource Center for Systems Security and Information Assurance (CSSIA) is raising the bar and setting even higher standards for 2012's Train-the-Trainer programs.

After successfully training more than 270 instructors in 2011, many in emerging virtualization technology with its hybrid training on demand innovation, CSSIA will be launching another refinement to the program. Trainings can now be requested for VMware 5, CCNA Security, Forensics, Ethical Hacking, Certified Information Systems Security Professional (CISSP) and many more; whatever it takes to help get faculty ready for their new challenges.

VMware 5, the latest in the VMware Train-the Trainer offerings, is a course that is a hands-on training experience exploring installation, configuration, and management of VMware vSphere 5, which consists of ESXi and vCenter Server. The course is based on ESXi 5 and vCenter Server 5. Completion of this course satisfies the prerequisite to take the VMware Certified Professional VCP 5 exam and seek vITA Instructor status.

All lab activities are delivered by CSSIA's Chicago cyber research Virtualization Data Center. This remotely accessible lab environment is powered by VMware, NDG NETLAB+ and Dell to provide the greatest possible experience in performance and reliability for students. Students who complete this course may enroll in any of several more advanced vSphere courses to continue their education.

See [www.vmware.com/education](http://www.vmware.com/education) for advanced course options. By instituting this program, VMware seeks to create a collaborative relationship with academic institutions whereby their students may obtain the VMware Certified Professional (VCP) status and seek other VMware certifications. Participation in VMware vSphere 5 will provide faculty or candidate faculty with VMware vouchers for exams as well.

For more information on scheduling a VMware 5 Train-the-Trainer or other training opportunities, contact Lynn Dohm at [lynn.dohm@morainevalley.edu](mailto:lynn.dohm@morainevalley.edu).

# 2012 Calendar of events

Women in Technology Dinner  
Palos Hills, Ill.  
**March 23**

Women in Technology Mentoring Workshop  
Palos Hills, Ill.  
**March 23**

Linux Server for Teachers  
Madison, Wisc.  
**May 21-25**

Pacific Center for Advanced Technology Teaching  
Honolulu, HI  
**May 17-18**

iPhone Application Development for Teachers  
Madison, Wisc.  
**May 21-25**

VMWare Certified Professional for Teachers  
Madison, Wisc.  
**June 4-8**

Android Application Development for Teachers  
Madison, Wisc.  
**June 4-8**

Girl Tech Mentoring Workshop  
Springfield, Ill.  
**June 13**

Girl Tech Camp  
Springfield, Ill.  
**June 14-15**

NetLabs Mentoring Workshop  
Palos Hills, IL  
**July 12-13**

## CONFERENCES

League for Innovation in the Community College  
Philadelphia, Penn.  
**March 4-7**

Cyber Defense and Disaster Recovery Conference  
Springfield, Ill.  
**March 9**

AACC 2012 Annual Conference  
Orlando, Fla.  
**April 21-23**

The Colloquium for Information Systems Security Education  
Lake Buena Vista, Fla.  
**June 11-13**

High Impact Technology Exchange Conference  
Denver, Colo.  
**July 23-26**

# WORKSHOPS

## Mentoring workshop series

The National Resource Center for Systems Security and Information Assurance now has a series of mentoring workshops available for others to disseminate the already successful CSSIA-sponsored events. The steps of organizing and achieving one of our workshops have never been made easier with CSSIA providing toolkits, one-to-one support, in-person training and job-shadowing opportunity.

## Women in Technology mentoring workshop

The Women in Technology Mentoring Workshop is devised to launch a mentoring program for girls and women in technology or to improve the mentoring program that you already have implemented. Research has shown that quality mentoring programs can have a significant positive impact on the lives of women. The Women in Technology Mentoring Workshop will provide a step-by-step guide for program coordinators on developing and sustaining successful mentoring programs. Learn what's involved and how to host one. Participants also will have a chance to shadow the coordinator during the Women in Technology Dinner that evening to gain a full understanding of the event.

## Girl Tech mentoring workshop

This is a two-day DIY for Girl Tech. On the first day, CSSIA staff will walk you through the entire process of putting together a Girl Tech workshop of your own. Discussion will be held on how to tailor your workshop to your specific location and share ideas on possible course topics. Included will be some hard-earned wisdom on what ideas don't work with middle-school girls.

On the second day, CSSIA invites you to watch Girl Tech 2012 at UIS in action; workshop attendees will have the opportunity to job shadow, observe and participate in the event.

## NetLabs mentoring workshop

This two-day workshop will instruct academic institutions/faculty on the procedures and processes for implementing a virtualized lab solution. Virtualized labs enable organizations to host real IT equipment, virtual machines, and lab content on the Internet to support IT training. Generally, these labs include all the software needed to provide an environment through which students may schedule and complete lab exercises for Information Technology courses.

Participants of this workshop will be performing a "from the ground up" build of the learning environment, to include both physical and software installations. Participants should be familiar with Cisco, VMware, and Microsoft Technologies before attending the workshop.

Register for CSSIA's mentoring workshops at [www.cssia.org](http://www.cssia.org).



# New ground broken in cyber security education

The Network Development Group (NDG), in collaboration with the VMware IT Academy Program, enables academic institutions to host a virtual lab for the VMware IT Academy Program Install, Configure, Manage (ICM) course, using a NETLAB+ server appliance. NDG provides host schools with documentation and customized lab exercises to facilitate easy setup and delivery of the ICM course, using a NETLAB+ system.

The NDG offering also includes support for cyber security events and competitions. The National Resource Center for Systems Security and Information Assurance (CSSIA) and Moraine Valley Community College have been on the forefront with NDG's NETLAB+ implementation and cyber security. The most important events enabled by NETLAB+ are the Cyber Defense Competitions where schools can compete to protect and defend their security in a virtual environment.

The VMware IT Academy Program is an important component of VMware education programs. The academic institutions that agree to participate in the VMware IT Academy Program fulfill an important role in providing VMware education worldwide. These academic institutions operate as business alliances of VMware with an objective of delivering educational services to their students.

The VMware IT Academy Program is designed to introduce students to VMware technologies and equip them with VMware technical skills to compliment their chosen fields of study. VMware will provide selected academic institutions with course materials developed by VMware for this purpose. By instituting this program, VMware seeks to create a collaborative relationship with academic institutions whereby their students may obtain the VMware Certified Professional (VCP) status and other VMware certifications.

VMware, NDG, EMC Corporation, CSSIA and Moraine Valley plan on continuing this cutting edge relationship. Schools around the world are collectively amazed and want to know how they can participate in the VMware IT Academy Program.

For more information, contact:  
[lynn.dohm@morainevalley.edu](mailto:lynn.dohm@morainevalley.edu)

## CAE2Y Update

The National Security Agency and the Department of Homeland Security jointly awarded Moraine Valley Community College as a National Center of Academic Excellence in Information Assurance 2-Year Education (CAE2Y) for the years 2011 through 2016. Moraine Valley has upheld its effort by serving as a model for two-year schools through innovative, comprehensive and multidisciplinary education and training in the information assurance/cyber security field.

This year, Moraine Valley and CyberWatch will be mentoring Ivy Tech Community College of Indiana, Florida State College, Sinclair Community College and El Paso Community College to receive their full CAE2Y. This partnership also will be working with eight other schools around the country to map the CNSS 4011 and 4013 standards. In addition to the mentoring programs, Moraine Valley is currently working with other CAE2Y members to publish a series of white papers designed to take a look back 10 years from when the original booklet entitled "The Role of Community Colleges and Cyber Security... A Look Back 10 Years" was published by AACC and NSF during the early days of developing cyber security programs. John Sands, Moraine Valley's CIT Department Chair, will present this article at several conferences over the summer.

For more information, go to  
[cae2y.morainevalley.edu](http://cae2y.morainevalley.edu)

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