



@ NSF (CESP) Scholars at Microsoft office on their Spring 2016 field trip.

## NSF (CESP) Scholars goes to Microsoft

National Science Foundation (NSF) Computing and Engineering Scholarship Program (CESP) scholars Syera Weah, Matthew Slauson, Akeem Saka, William Smith, and graduate assistant Nalindrani Malimage visited the second largest campus of the blue-chip giant Microsoft Corporation on March 3, 2016 at Fargo, ND. This was the scholar's spring 2016 field trip. The scholars gained insight into the history, operations and best practices of this \$93.58 billion (2015) company. They had the opportunity to ask firsthand questions to officials that enhanced their knowledge and understanding of technology utilization in the day to day operations of Microsoft.

This unique scholarship program not only provides monetary benefit for the scholars but also delivers inclusive marketable growth for them. The CESP scholars are motivated to initiate leadership activities, one of which led to this field trip. Akeem Saka, an outstanding CESP scholar, organized this elevating trip to Microsoft Corporation.

The IS Department will focus on building long-term relationship with Microsoft to generate internship opportunities for computing graduates. This will enhance the departments reach in terms of providing career opportunities for its students. IS department also plans to invite guest speakers from Microsoft in the future to train students on professional development.

## ICCP result higher than national's

The IS Department has observed a 100% increase in student participation for Spring 2016 ICCP (Institute for Certification of Computing Professionals) exam since starting in April 2015. Exam participants had a 75% success rate in Fall 2015 with one of the students scoring a notable 79% mark while the required passing rate is only 50%. Scoring above 70% is distinguished as Mastery level. The average score achieved by the students in Fall 2015 is 140.5, beating the national average of 132.11 by 6.35%. Students from Information Systems program are taking part in this high level exam under the patronage of the department chair, Dr. Susantha Herath.

IS Department is sponsoring the ICCP exam every semester for students graduating from the Information Systems program. ICCP certifies computer professionals globally, and the credentials are well accepted by employers including major government bodies. Passing the ICCP test makes you eligible to receive an ISA, CSA or DGSP certificate which not only sets you apart in the job market but also creates a base for further ICCP certifications. Additionally, the ICCP exam participants from IS Department gets an opportunity to receive up to 10% of the final grade of a selected course taken during the graduating semester. For more information, visit <http://iccp.org>

## LexisNexis partnership for HPCC Systems

The IS Department is forming an industry partnership with LexisNexis to work on HPCC (High Performance Computing Cluster) Systems. The partnership will provide training for future managers of Big Data projects for Big Data Processing, Big Data Analytics, Big Data Delivery, Compiler Optimization or Programming Language Development. HPCC Systems from LexisNexis Risk Solutions has more than a 10-year track record of proven, enterprise-ready, data-intensive supercomputing. LexisNexis will provide internship opportunities, training workshops, and materials for students under this program. Dr. Jim Q. Chen, professor of Information Systems is the project liaison. Dr. Chen leads a research-team at SCSU to learn and research the new platform and incorporate it in the curriculum to give students a competitive edge. Students will benefit from learning and working with a platform that was designed from the ground up to manage Big Data.

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## Hackers steal \$1 billion!

[Reuters] More than a month after hackers breached Bangladesh Central Bank's systems and attempted to steal nearly \$1 billion from its account at the Federal Reserve Bank of New York, cyber security experts are trying to find out how the hackers got in.

Investigators suspect that unknown hackers installed malware in the bank's computer systems and kept watching for weeks to learn how to go about withdrawing money from its U.S. account before the incident took place between Feb 4 and Feb 5. Bank official involvement was not proven so far.

Investigators believe that the attack method was sophisticated, describing the use of a "zero day" and referring to an "advanced persistent threat", said the officials.

Jeff Wichman, a consultant with cyber security firm Optiv, suspects that one of the tools was a customised version of malware known as a Remote Access Trojan, or RAT, which gives attackers the ability to gain remote control of a victim's computer.

The New York Fed, which provides banking services to some 250 central banks and other institutions, has said its systems were not compromised.

FireEye Inc's Mandiant forensics division is helping investigate the cyber heist, which netted hackers more than \$80 million before it was uncovered. Some \$80 million are believed to have ended in the Philippines, and further diverted to casinos and then to Hong Kong. One \$20 million transaction was directed to a non-profit organization in Sri Lanka. The unusually large transaction for the island nation and a misspelling of the NGO's name raised red flags that helped bring the robbery to light. The transaction was blocked as was another huge payment instruction for between \$850 million and \$870 million.

• Source: <http://fortune.com/2016/03/12/malware-bangladesh-bank-heist/>

## SAP Recognition Award

St. Cloud State University, as a member of the SAP University Alliances program, offers the SAP® Student Recognition Award certificate for satisfactory completion of a program of study supported by the SAP Business Suite. To qualify, students must complete the following 3 academic courses. These Information Systems (IS) courses are approved by the SAP University Alliances.

- IS 340 Management Information Systems (selective sections)
- IS 484 Business Process Management
- IS 485 Enterprise Systems

Students who earn the award will demonstrate

depth and breadth of their knowledge using state-of-the-art software, developing valuable skills relevant to their careers/chosen fields. The certification will also add credibility for a student seeking better opportunities.

SAP is the global leader in enterprise application software, with more than 170,000 customers in more than 120 countries. They provide enterprise resource planning (ERP), business intelligence (BI) and related applications and services that enable companies of all sizes and in more than 25 industries.

The IS Department liaison for all SAP course related information is Dr. Changsoo Sohn, e-mail: [csohn@stcloudstate.edu](mailto:csohn@stcloudstate.edu).

## SAP University Alliances



@ SAP training at Centennial Hall computer lab.

## World of Watson!

### *It's elementary, Watson!*

Sounds like Sherlock? Well, think again! The cognitive world of artificially intelligent computer systems has come a long way over the past years. If you have dreamed about uploading a book into a computer and asking it questions to get quick answers before the exam, it's time to wake up with that reality now. Meet Watson, the platform for cognitive business.

### *I am a brain, Watson.*

80% of all data today is unstructured. This includes news articles, research papers, business reports, social media posts and enterprise system data. IBM Watson is a technology platform that uses natural language processing to understand grammar

with context and machine learning to evaluate all possible meanings to determine what is being asked then reveal insights based on supporting evidence and quality of information found from large amounts of unstructured data. Watson can answer your customers' most pressing questions, quickly extract key information from all documents or even reveal insights, patterns and relationships across data.

### *You know my methods, Watson.*

How does Watson answer questions? Well, like any human being, Watson first needs to learn a new subject before it can answer questions about it. Like, are you serious?

For Watson to learn a new subject, all related materials are loaded into Watson, such as Word documents, PDFs and web pages etc.

Question and answer pairs are then added to train Watson on the subject. Once this is done, Watson is automatically updated as new information is published.

When Watson answers a question, it searches millions of documents to find thousands of possible answers. Watson collects evidence and uses a scoring algorithm to rate the quality of this evidence. All possible answers are ranked based on the score of its supporting evidence before answering. Now, that sounds like a reliable person!

The World of Watson 2016 Hackathon and Conference is taking place from May 23-24, 2016 at Pier 36, NYC. If you are interested, Watson recommends to register and book flights early!

• Source: <http://www.ibm.com/smarterplanet/us/en/ibmwatson/>

## Meet the Faculty

Dr. Dien D. Phan CH 329 phan@stcloudstate.edu  
Dr. Changsoo Sohn CH 338 csohn@stcloudstate.edu



**Dr. Dien D. Phan**  
*Professor of Information Systems*

Dr. Dien D. Phan received his B.S. in Accounting at St Cloud State University in 1978, MBA at the University of Minnesota in 1981, and Ph.D. in MIS at the University of Arizona, Tucson, AZ in 1990. After 10 years of employment at IBM Corp. in Rochester, MN as software Architect, he joined the Business Computer Information Systems department at SCSU in 1991. He was the visiting associate professor at Lingnan University, Hong Kong during 1997-1998. In 1999, he was awarded for two years the Nicole Maria Stata Endowed Chair in MIS at the University of Vermont, Burlington, Vermont.

His research interests include e-commerce strategy, project management, and software development. His research publications are well received by readers. In 2004, his paper entitled “E-Business Development for Competitive Advantage: a case study” published on *Information & Management*, Vol.40, No. 6, July 2003, was listed as the Elsevier’s number 1 in the 10 most popular articles in the areas of Business, Management and Accounting. In 2010, another paper entitled “A model of customer relationship management and business intelligence systems for catalogue and online retailers” published on *Information & Management*, Vol. 47, issue 2, 2010, was ranked the second most download article of *Information & Management* journal in 2010. His early research on e-commerce and software development are recognized on two European Wikipedia pages,

- [https://nl.wikipedia.org/wiki/Electronic\\_commerce](https://nl.wikipedia.org/wiki/Electronic_commerce)
- [http://fi.wikipedia.org/wiki/Ohjelmiston\\_vaatumismäärittely](http://fi.wikipedia.org/wiki/Ohjelmiston_vaatumismäärittely)

During the past 25 years, Dr. Phan taught many courses at SCSU including Introduction to MIS, Systems Analysis and Design, Telecommunications, IT Project Management, MBA Information System Strategy, and ERP Business Process Management (SAP). As an active member of SAP University Alliances North America, he invited Erin Meagher, Corporate Director of SAP development and John Johnson, Employee Education Coordinator at 3M Corporation to visit SCSU in March 2015 to present on SAP development efforts at 3M. He helped promote the newly launched SAP ERP training in Herberger Business School. By the fall of 2015, 3M returned to campus recruit students who had SAP ERP training. In addition to SAP University Alliances, Dr. Phan serves as the faculty member of Project Management Institute Education Outreach, Central Minnesota chapter which provides recertification training to certified Project Management Professionals (PMP, CAPM, PgMP, PMI-SP, and others) in Central Minnesota. As part of PMI Education Outreach, SCSU students with interests in Project Management frequently attend free PMI sponsored seminars hosted at various local businesses such as CapitalOne Bank, CentraCare Healthcare, Wolters-Kluwer Financials, Creative Memory, and MnSCU.

Dr. Phan is on sabbatical leave and will return for Fall’16 semester.



**Dr. Changsoo Sohn**  
*Professor of Information Systems*

Dr. Changsoo Sohn joined the Department of Information Systems in July 2000. He has taught many IS and MBA courses like IS 451, IS 340, IS 485, and MBA 616. Before joining, he obtained a Bachelor degree in Business Administration from Seoul National University, Seoul, Korea and an MBA and Ph.D. from Southern Illinois University, Carbondale, Illinois. He worked for Samsung Headquarters before beginning an MBA program. Between 2003 and 2006, he served as an associate dean of the Graduate School of Business Administration at The Catholic University of Korea.

His main research interests are impacts of information systems on customers’ behaviour. His research was published in many journals and conference proceedings. He was a recipient of the “Gopal Kanji Prize for Best Article of 2008” with “Development of e-Service Quality Measure for Internet-based Financial Institutions” in *Total Quality Management & Business Excellence*.

Currently, he serves as a faculty coordinator of SAP/ERP. He organizes many SAP-related events and prepared ERP related courses. From spring 2016, the IS department will give the “SAP Student Recognition Award” for successful completion of ERP related courses.

His main focus in teaching is for students to obtain practical knowledge that they can use right away after graduate. Thus, he tries to introduce many tools that are used in the real world. He is currently developing many hands-on materials incorporating data analytics, data mining, text mining, and Enterprise Resources Planning.

### The IS Department website has a new look!

Collaborating with the University Communications (UCOMM) team, professor Paul Safonov and graduate assistant Mohammad A. H. Shahi, the IS Department website now has a more inviting and streamlined feel. A goal of the updated website was to ensure current and prospective students can find what they need more quickly. Use of repository was introduced for archiving in the Newsletter section. Scholarship opportunities have easier access to SCSU Foundation. The new website went live on March 24, 2016. Be sure to check it out at <http://www.stcloudstate.edu/is/>.

## Security Talk by CyberCorps® Scholars

MSIA students Michael Virnig and Scott Rysdahl presented on The Top Online Threats of 2015 at CapitalOne Café in downtown St. Cloud on March 2, 2016 under the supervision of Dr. Mark Schmidt, Director of Center for Information Assurance Studies (CIAS). The event was attended by employees, students and the café patrons who were interested in learning more about data security.

The presentation aimed to inform people about the threats that the online world presents and the challenges to overcoming these vulnerabilities faced by employers and employees. Focus was also given to make sure that the systems were updated regularly and employees adopted smart practices in their daily routines.

Professor Schmidt talked about scholarships being offered at St. Cloud State University and how the university is designated as a National Center for Excellence in Information Assurance/ Cybersecurity.

SCSU offers the CyberCorps® Scholarship for Service (SFS) which is a unique program designed to increase and strengthen the cadre of federal cyber security professionals that protect the government's critical information infrastructure. This program provides scholarships that will fully fund the typical costs incurred by full-time students,



@ At the Security Talk event with Dr. Schmidt (2nd from left)

including tuition, books, health insurance and travel to annual CyberCorps® job fair and conferences. Additionally, the scholarship pays stipends of \$22,500 per year for undergraduate students and \$34,000 per year for graduate students. The scholarships are funded through grants awarded by the National Science Foundation.

Current SFS students attended the annual job fair in January 2016 held in Washington, DC that invites Government hiring managers (Federal, State, Local, or Tribal) to recruit talented college students for the their cyber security needs.

• Reporter: Warda Saif, MSIA

## Jotting from the Doughnut Hole

- By Dr. Dennis C. Guster

Too often within computing disciplines the focus is on using a piece of prewritten software. Certainly prewritten software that truly helps solve a problem is cost effective. However, what does one do when a problem evolves and there is no existing software to deal with it?

General purpose computers can be readily adapted as a problem solving platform for a wide variety of problems. However, over time instructional practices have shifted from a fine grain problem solving approach to a macro oriented approach of just adapting the easiest to use prewritten software. While prewritten software can solve problems there are often hidden costs. Within the BCRL recently we experienced a problem with a web site written with an easy to use development tool. While content was devised and displayed the site was vulnerable to attack and some hackers had a field day exploiting the site. Had it been developed using object oriented techniques with a compiled language, I seriously doubt the site would have been so seriously compromised. This takes us to one of the prime topics of my IA 673 Risk Assessment class. Short term, it may seem like easy to use software is an inexpensive short cut but in reality the cost of a breach of this type especially in an e-commerce system within a large company could be a several million dollar mistake.

Speaking of developing new software, because computers are essentially number manipulators (yes even when you use letters they are converted to numbers!) the heart of that new software is some sort of algorithm. Fortunately, within the BCRL, we have had the opportunity to work on many algorithmic design projects. Most of these projects were spearheaded by Renat Sultanov, who is a nuclear physicist and Research Scientist within the BCRL. These projects are very computational intensive and require high performance

computing meaning that they are well suited to the primary mission of the BCRL which is distributed processing.

For years Renat has been working in the area of assessing the energy created by the collision of molecules. However, the existing algorithms were designed to calculate the result of only symmetrical collisions such as two hydrogen molecules each containing 2 atoms ( $H_2 + H_2$ ). There was a need, however, to calculate the energy potential in non-symmetrical systems such as  $H_2 + HD$ , where HD is a hydrogen isotope that contains only a single atom. To solve this problem Renat was able to “split the symmetry and create a potential energy surface for the HD isotope. Interestingly, in my discussions with Renat there was joy in solving this complex problem, but we finally decided that the real value was in the method! This method was transferrable to other non-symmetrical molecule systems!! Oh, doesn't this sound like something from IS 251 class related to object oriented programming; reuse code!

While on the surface this may seem like a minor breakthrough, but it is actually important foundation work and could in part be used to further developmental activities in anti-matter, cold fusion and quantum information systems. It is important to share the results with others working in the field and a description of the methodology appears in the Journal of Physics B: Atomic, Molecular and Optical Physics, Vol 49 (2016) Iss. 1 pp. 015203. The algorithm is depicted in detail in Appendix A. The authors are Sultanov, et al (and others). Just for the record I am included in “et al” and proud to be associated with such fine work. Oh, it seems the work has generated a little national attention. Renat has been invited to Harvard to conduct a seminar on this work in April.

That is all for now the doughnuts are calling, a doughnut with a hole makes me want to “turnover” this column to Apple!

## St. Cloud Diaries

- By Unmesha Punyamurthula



As I glanced through my acceptance letter from St. Cloud State University for the first time back in April 2015, there were many feelings which fled through me at the same time. I was excited to be given an opportunity to prove myself on such a huge platform whilst also feeling nervous and scared as to how I would be facing all the tasks ahead of me. It was the first time I was going to stay away from my family. Suddenly, I had a sinking feeling that I was growing up and will have to become more independent. After which seemed to be the longest time I had to wait, August arrived with unforgettable memories, countless thoughts and an invaluable amount of love, and I started a new chapter of my life.

My life at SCSU began with an orientation week which exposed me to the numerous

opportunities available for me to explore and made me feel more affiliated to the university. As the classes started, I could see the difference in approach between the universities in India and in the US and felt determined to work on the difficult tasks ahead of me. As days went by, I was performing well in my courses and managed my daily chores well but I felt an urge to learn something more. I was lucky that I came across some interesting tasks and I felt this was an opportunity for me to prove myself which I duly accepted. I worked hard on each of the tasks and was rewarded by more opportunities to excel.

As the semester ended, I looked back at the journey and felt inspired for the road ahead. These six months had changed me as an individual and made me feel more independent giving me the confidence to achieve more exciting goals on this magnificent journey. I have learned to balance work and education. Everything that I went through and what I got has boosted me and I'm looking forward to unfolding many new challenges coming up in my life.

**Congratulations! to SCSU CCDC team for re-claiming the top crown by finishing in 1st place at the 2016 Minnesota Collegiate Cyber Defense Competition (CCDC). MSIA student Scott Rysdahl led the team this year.**

## Thirty Cities, Three Years

- By Brikken Jensen



Not many people would think "travel" when picturing themselves in college. Most people imagine hours of studying, joining clubs and focusing on graduation during those four years. At least that's what I envisioned as a freshman. Since then I have traveled to over thirty cities, around the world, in just under three years. My friends and family have been shocked by this. I can see the single-word question in their eyes, How? The answer: search for opportunities.

As a college student you're in the unique position to be actively developing yourself, not just in the classroom, and traveling is a great option. I've been to eight national

events within my co-ed fraternity, Delta Sigma Pi, including one in Chicago, IL and I was a delegate. I attended the National Conference for Collegiate Women Student Leaders (NCCWSL) in Washington D.C. last year and made dozens of contacts. And I helped organize a TEDx conference while studying abroad in Germany in fall 2015.

I would attribute all of this to having an open-minded, with an ambitious and determined attitude. These were all opportunities that I heard about and went for. I found the means of funding all of these excursions through a combination of scholarships, stipends and work. I've managed to travel, meet people and not go broke. Yes, it is possible! I am proof.

These experiences are invaluable. Take advantage, search for opportunities and go see the world! Especially while you can claim being a student. It is another way to set yourself apart.

## Alumnus Insight

- By Ifte Rana



When I attended St. Cloud State University in 1998 during dot-com boom, demands for the software professionals were extremely high.

The Y2K bug was looming around and corporations all over USA were frantically hiring IT professionals to make sure their enterprise systems were going to work as we entered the first day of year 2000.

By the time I graduated from SCSU, the dot-com boom was a thing of the past. The USA entered the phase of dot com bust and hundreds of thousands of IT workers were laid off. Entry level IT jobs were hard to find. Despite all the odds I landed a job six months before I graduated. And it was possible because of the "for credit" internship opportunity through SCSU.

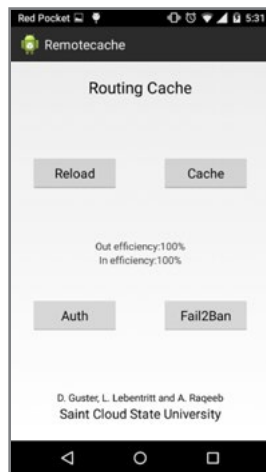
My advice to anyone trying to land an IT job would be to look for internship opportunities during their junior and senior years. As you start your search for an internship opportunity, please spend time in creating a strong resume. Highlight the important courses you have taken and mention any software projects that you have successfully completed. Participate in mock interviews and bring in examples of your work to the interview. Additionally, mention any volunteer activities you have participated in. This will highlight your leadership skills. Start an online blog on whatever topic you are interested in. This will highlight your communication skills. Research which certifications are in demand, so get certified. And always, always submit a cover letter with your resume.

**Ifte Rana, an alumnus of SCSU, is presently working for Mayo Clinic, Rochester, MN as the Head of Enterprise Interface unit.**

## Raqeeb Abdul and Dr. Dennis C. Guster Collaborate on Mobile Apps Development

The MSIA student-faculty pair worked on two projects during Fall 2015 semester related to managing the security of Virtual Machines with mobile APPs.

The first paper entitled 'Mitigating Virtual Machine Denial of Service Attacks from Mobile Apps' was published with the help of former MSIA student Erich Rice in the Journal of Network and Information Security Vol. 3, Iss. 2, pp. 21-31. In this project, rogue processes are identified based on their high CPU and memory usage. Under normal circumstance the goal would be to kill the process immediately and the devised mobile APP supports that process. In case a good process goes wrong, rather than implementing a kill, the mobile APP gives an option to stop that process. This action prevents the process from causing any further damage and keeps data for further analysis in finding the cause.



@ App Screenshot

The second paper entitled 'Developing a Mobile APP that Uses the Routing Cache Table to Detect Brute Force Secure Shell Attacks not Detected by the Intruder Detection System' has been submitted and accepted for publication in the proceedings of the Midwest Instructional Computing Symposium, 2016. This paper was written

in collaboration with Laura Lebintritt, a recent Cyber Security graduate of the University of Maryland University College. In this project, the routing cache is mined in an attempt to catch secure shell hacking attacks that don't trip the intrusion detection system. The mobile APP is developed to identify and provide a quick means of blocking attacks from renowned non-whitelisted addresses (source entries not present in the routing cache table). The APP screenshot reveals that one can check with it the entries in the routing cache, ascertain whether the attack was caught by the fail2ban intrusion detection system and also see if the authentication log caught the attack. The cache efficiency is due to the protected zone within a cloud environment that the virtual machine(s) resides in.

The authors plan to continue work in this area. To facilitate future work a data base was created and the data used in the analysis is stored in a central location. Therefore, it is hoped that a single APP family can be devised that will access that database providing the functionality to support a number of security management needs.

## 19th Annual SCSU Student Research Colloquium Presenters (Paper/Oral) from IS Department

<i>Project Title</i>	<i>Student Presenter(s)</i>	<i>Faculty Sponsor</i>
Quantum-Mechanical Treatment of Hydrogen Ion Dynamics in Carbon Nanotubes	Daniel Finazzo, Anthony Kunkel	Dr. Dennis Guster
Web Hacking	Bhavika Gandi, Yutong Han	Dr. Mark Schmidt
The Smart Killer	Donald Hafing	Dr. Mark Schmidt
Forensic Investigation of Stolen Files and Private Browsing	Gaudencio Vidigal	Dr. Mark Schmidt
Corporate Espionage	Sheik Alam, Parves Kamal	Dr. Mark Schmidt
Fictitious Criminal Case	Shravani Meneni, Anusha Thottempudi	Dr. Mark Schmidt
Forensic Case Examination	Ryan Salner	Dr. Mark Schmidt
Database Security in Financial Services Using Security Socket Layer & Transparent Data Encryption	Meera Nikhil Chandra Guntaka	Dr. Qingjun Chen
Steganography in Criminal Activity	Houa Xiong	Dr. Mark Schmidt
Solving A Mystery of A Missing Girl	Elina Khadka, Rity Tamang	Dr. Mark Schmidt
A Frictitious Case	Sudip Kandel	Dr. Mark Schmidt
Digital Forensic Investigation	Ashwini Jha	Dr. Mark Schmidt
The Cold Blooded Murder	Sri Rama Chandra Charan Tej Dasari, Raissa Ouedraogo	Dr. Mark Schmidt
Crime Case Solved Using Digital Forensics Tool	Alon Paudel, Sanjina Shakya	Dr. Mark Schmidt
Mobile Tracking and Spying	Kasun Basnayake, Nirajan Rijal	Dr. Mark Schmidt
Compromising Windows Xp Using Metasploit Framework and Prevention Recommendation	Bikrant Gautam	Dr. Susantha Herath
IA 681 - Digital Forensics Case Study	Jon Munsch	Dr. Mark Schmidt
Hard Drive Analysis	Aashika Khadka, Christopher Howe	Dr. Mark Schmidt
Murder for Life Insurance	Simon Konney	Dr. Mark Schmidt

\* find more details at <https://www.scloudstate.edu/src/>

## IT Internship program

The on-campus Maverick IT Internship program is planning to move from Headley Hall to a new home in Integrated Science and Engineering Laboratory Facility (ISELF). The new home features better facility and more space for future growth.

The Maverick program is a first-of-its-kind at St. Cloud State University and connects students with industry partners. The top Information technology students from Computer Sciences and IT, Electrical Engineering, and IS majors are recruited to work on software development and testing projects for Symantec Corporation's NetBackup Quality Engineering Teams. Students typically are assigned to project teams that rotate each quarter and are led by a Symantec project manager. Without leaving campus, students are able to gain real-world development and test experience working with cutting-edge technology. As a member of a NetBackup project team, students also strengthen interpersonal and communication skills through team interactions.



### Facts:

- Office opened September 2011 with 10 students and one client, Symantec
- Program has grown to 25 students 4 years later with expansion to non-technical majors
- Grown to 3 clients Symantec (Veritas), Cognex, Polaris
- Employed a total of 60 students over the 4 years of existence (includes 25 current students)
- 25 students have graduated from the program. All graduates have found full time employment

## D2L presence and research activities with IA Club



@ Information Assurance (IA) Club members at the General Meeting.

The Information Assurance (IA) Club at SCSU is a student-run organization for students in Information Assurance, Information Systems, and other IT and cyber security focused programs. The club was formed to allow like-minded students to interact with one another outside of class and to expand their knowledge in cyber security and IT field.

In Spring 2016, IA Club announced their first official D2L presence. They hope to utilize the privilege by allowing members to discuss/share resources about their courses and collaborate on extracurricular projects. "It is very important for the students to have a space where they can collaborate to grow with the knowledge they have gained in classes." - says club Executive Team.

IA Club also announced their Spring 2016 extracurricular research groups to focus on new technology and security related topics

and to gain hands-on experience. They are,

- Honeypot security research
- Hadoop database setup and configuration
- Android mobile app development
- Penetration testing/ethical hacking

IA Club hosts their biannual two-day long flagship event titled 'Computer Security Awareness Event' with an idea to provide relevant and timely information on cyber security to the greater St. Cloud community. This event includes information security related presentations/demonstrations/movie screening and invites several guest speakers from the IT security industry.

The IA Club is open to all students from SCSU who have an interest in information security and meets the first Wednesday of every month at 2:30-3:30 pm in the Student Organizations Collaboration Area (SOCA) for board meetings. To join: <https://stcloudstate.collegiatelink.net/organization/msia>.

## SCSU Cyber Defence Team vs Red Team in Regionals!

On March 5, 2016, St. Cloud State University competed against seven other colleges and universities at the annual Minnesota Collegiate Cyber Defense Competition (CCDC) event. They went on to win the competition and will represent the State of Minnesota at the regional CCDC event in Chicago, IL, in April.

The goal of the CCDC competition is to provide academic institutions with an opportunity to test their students' depth of understanding and operational competency in managing the challenges inherent in protecting a corporate network infrastructure from real-world attacks.

The format of the competition requires student teams to assume administrative and

protective duties for a simulated commercial network – typically a small company with 50+ users and 7 – 10 servers providing essential business services. Each team begins the competition with an identical set of hardware and software and is scored on its ability to detect and respond to attacks by professional hackers, maintain availability of existing services, implement new services, and report on successful attacks against the business infrastructure.

The SCSU team is made up of students from the Information Assurance, Information Systems, Computer Science, and Information Technology Security programs. The team captain this year is Scott Rysdahl, a first-year MSIA student and recipient of the NSF CyberCorps scholarship.



## Congratulations!

Academic Excellence Awardees for Fall 2015

### Information Systems \*

Ahmad Aljhdali  
 Mohammed Alotaibi  
 Obeth Aranda  
 Brandon Burggraff  
 Elisabeth Draisey  
 Olabisi Ewumi  
 Brian Feia  
 Kailey Ganskop  
 Bibek Koirala  
 Anthony Kuschel  
 Rashmita Lama  
 Moua Lee  
 Toua Thor Lee  
 Joseph Mosley  
 Kassim Mursal  
 Martha Mutwa  
 Luke Reinsma  
 Matthew Slauson  
 William Smith

Erick Vega Salmeron  
 Jamie Voelker  
 Destiny Vosberg  
 Svera Weah  
 Mitchell Wischmann  
 Kia Xiong  
 Souvan Yang

### Information Assurance \*\*

Raqeeb Abdul  
 Mhd Redwan Albougha  
 Vinay Kumar Ananthu  
 Hareesh Reddy Eemani  
 Punith Reddy Etikala  
 Hazem Farra \*\*\*  
 Bikrant Gautam  
 Ashwini Jha  
 Parves Kamal  
 Sudip Kandel

Aashika Khadka  
 Mustafa Khambatta  
 Mahender Korre  
 Veenadhari Kotha  
 Babu Rajeev Maddipati  
 Arbin Maharjan  
 Swarna Manchikatla  
 Jonathan Munsch  
 Priyanka Murtyala  
 Karthik Paidi  
 Sudip Pariyar  
 Scott Rysdahl  
 Andrea Sanchez  
 Fabrice Savadogo  
 Mohammad A. H. Shahi  
 Shivam Soni  
 Afreen Sultana  
 Ananta Vaidya  
 Gaudencio Vidigal  
 Chandira Withanage



## Farewell!

Graduates for Spring 2016

### Information System

Musaad Aldaej  
 Annan Alghanem  
 Ahmad Aljhdali  
 Mohammed Alotaibi  
 Brandon Burggraff  
 Tameka Cannon  
 Alec Doetskott  
 Anthony Erickson  
 Brian Feia  
 Kailey Ganskop  
 Avash Gautam  
 Keenan Hary  
 Lukas Heiser  
 Andrew Johanson  
 Chandu Kasthuriarachchi  
 Bibek Koirala  
 Md Mahmood  
 Scott McNamora  
 Lee Moua  
 Casey Mueller  
 Kassim Mursal  
 Martha Mutwa  
 Vuong Nguyen  
 Tyler Perowski  
 Akeem Saka  
 William Smith  
 Changkong Vang  
 Jamie Voelker

Destiny Vosberg  
 Drew Winkelman  
 Xueting Xie  
 Kia Xiong  
 Gary Yang  
 Souvan Yang  
 Hana Zemedu

### Information Assurance

Makarim Abda  
 Aakash Bhandari  
 Deepak GC  
 Donald Hafing  
 Shajive Jeganathan  
 Ram Santosh Kodeboyin  
 Sanjesh Kumar  
 Siva Madduri  
 Arbin Maharjan  
 Minesh Malla  
 Prasad Mawilmad  
 Sandip Phuyal  
 Raj Pun  
 Farouk Samu  
 Andrea Sanchez Dominguez  
 Saminda Siriwarde  
 Afreen Sultana  
 Ananta Vaidya  
 Chandira Withanage

\* Criteria for Information Systems program: GPA >= 3.50 taking credits >= 12 in that semester.  
 \*\* Criteria for Information Assurance program: GPA >= 3.75 taking credits >= 8 in that semester.  
 \*\*\* Hazem Farra achieved Academic Excellence for spring 2015 which was erroneously omitted from fall 2015 newsletter (Vol. 2, No.1).

NB: Academic Excellence Awardees of Fall 2015 and Graduating Students of Spring 2016 will receive recognition certificate at the Spring 2016 Student-Faculty-Staff (SFS) Celebration.

## Capturing the value of Project Management

On March 22, 2016, Terri Kimball, PMP, the current President of the Minnesota Chapter of Project Management Institute (PMI) and Program Manager (PM) with Donaldson Company, was invited as a guest lecturer by Dr. Lynn Collen to share her wealth of knowledge gained through 25+ years of experience in Project Management with the students. More than 50 people attended this one hour public presentation followed by Q&A and networking sessions.

The presentation included a case study of how a rigorous approach to project, program and portfolio management increased project success rates and team efficiency by creating a culture for high performing teams. "The Project Manager's Toolbox" delivered extremely useful information for the students as they learned through the pitfalls, strategies, actions detailed in the case study. Terry provided relevant facts and figures to clarify understanding including real life examples about operational and financial aspects of managing projects.

Students appreciated the informative presentation and expressed their intensified interest in practicing project management professionally.

## Upcoming Special Events

Date	Time	Venue	Event
04/06/2016	12:00 pm	CH 350	LinkedIn / How to network with professional SCSU Alumni
04/07/2016 04/08/2016	08:00 am 05:00 pm	CH 408	MSIA Student's Starred Paper/ Thesis Presentations
04/09/2016	05:00 pm	Midtown Square Mall	IS Club Spring Banquet
04/18/2016	12:00 pm	CH 100	Student-Faculty-Staff (SFS) Celebration
04/19/2016	08:00 am 06:00 pm	Atwood Memorial Center	19th Annual SCSU Student Research Colloquium
04/23/2016	01:00 pm	CH 494	ICCP – Outcome Assessment Exam for graduating seniors
04/29/2016	12:00 pm	River Side Park	IS Club Spring BBQ
05/06/2016	10:30 am	Herb Brooks National Hockey Center	SCSU Commencement
05/06/2016	08:00 am	AMC Voyageurs	Spring graduation reception
05/06/2016	08:30 am	AMC Glacier	Graduate MSIA and MBA Hooding Ceremony

## CYBER SECURITY AWARENESS EVENT

April 6-7 | 10 am - 5 pm | Atwood Theater and Lounge

Get live info @ <https://www.facebook.com/events/837832232991889/>

HADOOP | HONEYPOT | MOBILE APPS DEVELOPMENT  
 Big Data Analysis | Security Research | Android Platform  
 PENTESTING | DIGITAL FORENSIC  
 Ethical Hacking, Password Cracking | Computer Crime

## Have an interesting update/article/experience/news/idea/event to share?

We are always seeking contents and suggestions for our newsletters. If you are interested to submit a writeup not exceeding 250 words with relevant high resolution image, please feel free to contact the IS Department office or send an e-mail at [is@stcloudstate.edu](mailto:is@stcloudstate.edu)



Published By:  
 Department of Information Systems  
 CH 443 | (320) 308-2174  
 Herberger Business School  
 St. Cloud State University

Editor: Mohammad Ashrafuq Huq Shahi, MSIA



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