Current Events: Two NYPD Officers Killed

On December 21, 2014, two New York City police officers sitting in their patrol car in Brooklyn were shot and killed at point-blank range. According to the NY Times, the suspect traveled from Baltimore vowing to kill police officers. The suspect then committed suicide with the same gun used in the murders. The murdered officers, Wenjian Liu and Rafael Ramos, were in their squad car near Myrtle and Tompkins Avenues in Bedford-Stuyvesant. The gunman, Ismaaiyl Brinsley, approached the passenger-side window and shot both officers several times in their heads and other areas of their upper bodies. According to the authorities, the officers did not have an opportunity to draw their weapons. Brinsley ran down the street and onto the platform of a nearby subway station, where he killed himself as officers surrounded him.

Brinsley had a long history of criminal activity that included robbery and carrying a concealed gun. In response to the Eric Garner and Michael Brown cases, Brinsley made statements on social media claiming that he planned to kill police officers. In an Instagram post that included an image of a firearm, Brinsley proclaimed that his attack was retribution for the deaths of Garner and Brown. Brinsley’s Instagram post included a caption, which read: “I’m Putting Wings On Pigs Today. They Take 1 Of Ours......Let’s Take 2 of Theirs #ShootThePolice #RIPEricGarnder #RIPMikeBrown.”

The authorities in Baltimore sent a warning to the NYPD, stating Brinsley had made these claims. The warning was not received in New York until the crime was already in progress.

“Today two of New York’s finest were shot and killed with no warning, no provocation,” Police Commissioner William Bratton said at Woodhull Hospital in Williamsburg, where the officers were declared dead.

“They were, quite simply, assassinated — targeted for their uniform and for the responsibility they embraced to keep the people of this city safe.”

New York City Mayor, Bill de Blasio, has taken severe criticism for statements he has made regarding the Eric Garner and Michael Brown cases and for statements regarding the actions of the NYPD. Dozens of officers turned their backs to the mayor as he walked into a news conference, as well as when the mayor made appearances at the officers’ funerals.

Officer Liu, who had only been married two months, had been a seven-year veteran of the force.
Faculty Spotlight: Joe Giordano

Joe Giordano considers himself a lifetime "Utican." He was born and raised in Utica, and has lived and worked in the area for his entire life. He attended local schools and graduated from Thomas R. Proctor High School in 1975. His educational background also includes an Associate’s Degree from Herkimer County Community College in Social Sciences, a Bachelor’s Degree from Utica College in Computer Science, and a Master’s Degree from Syracuse University in Adult Education. His 1981 graduating class at Utica College may have even been one of the first classes to graduate computer science students, as the degree program was new to UC at that time. Giordano’s admiration for the development of a well-rounded education is evidenced by his undergraduate career, which was also characterized by an emphasis on mathematics and the liberal arts. Giordano is also a graduate of the United States Air Force’s Air Command and Staff College where he studied national security issues, the theory of warfare, military affairs, and geopolitics.

In terms of professional activities, Giordano is currently a member of the Association of Certified Fraud Examiners, the Armed Forces Communications and Electronics Association and the Operations Security Professionals Society.

Just a month after graduation, Giordano took on a job as a U.S. government employee at the Air Force Research Laboratory (AFRL). He worked at AFRL from 1981-2007. Giordano described his time there as nothing short of an incredible career experience. His career focus involved military research and development (R&D). He had the good fortune of working in the field of cybersecurity before such a field even existed. Not many people know this, but AFRL was an early innovator in the field of cybersecurity, having started research and development on the topic in the late 1970s, only a few years before Giordano began his career. He drew from his understanding of the social sciences and expertise in computer science to produce the best possible contributions to the field of military cybersecurity R&D. Giordano’s areas of expertise at AFRL included database technology, cybersecurity, information assurance, and cyber warfare.

In 2007, after 26 years at AFRL, he decided to retire early and take on some new challenges. After his retirement from the AFRL, he worked at ITT (now Exelis), a worldwide high-technology company where he served as the Technical Director of the Cyber Information Management, Processing and Exploitation group. He also worked part-time at Assured Information Security, a small business that specializes in cyber operations R&D.

Most recently, Giordano has maintained his involvement in the field of cybersecurity, even becoming a co-founder of Anjolen, a cyber-research company, along with his Utica College colleagues, Dr. Len Popyack and Tony Martino.

In 2008, Giordano joined Utica College, where he currently serves as a Professor of Practice and the Director of the Cybersecurity Master of Science degree program. He previously served as the Director of the Economic Crime Management Master of Science degree program. He teaches a variety of courses including CRJ 333, Information Security and CRJ 461, Senior Seminar. He recently created a new course, CRJ 228, Cyber Technologies for Criminal Justice, which is a technology-based course for all criminal justice majors. He has also taught a variety of courses at the master’s degree level in cybersecurity and economic crime investigation.

Professor Giordano has a true passion for teaching and has enjoyed each and every minute of his teaching career. His philosophy of teaching is student-centric and focused on supporting each student’s intellectual inquiry and acquisition of practical skills. He enjoys helping students achieve this by creating a collaborative relationship in the classroom. He makes sure that he is available to students in the classroom, online, during office hours or whenever he is needed. His classes are designed in such a way as to allow the students to develop hands-on skills necessary for professional environments. In his spare time, Joe enjoys family time, working out, bike riding, reading and gardening.
Medical Identity Fraud Alliance

Utica College’s Center for Identity Management and Information Protection (CIMIP) is a founding member of the newly organized Medical Identity Fraud Alliance (MIFA). MIFA is the first public/private alliance, specifically uniting stakeholders in jointly developing solutions and best practices for the prevention, detection and remediation of medical identity fraud. Medical identity theft/ fraud constitutes a major societal problem exerting pressure on the U.S. health care system.

Currently, factors that have demanded MIFA’s immediate action include electronic intrusion (breaches) into personal Protected Health Information (PHI) and the recognition of a significant increase in the value of PHI because of its use by hackers and sophisticated criminal organizations.

The use of PHI to obtain goods and services constitutes healthcare fraud. Victims of medical identity theft include not only the person, whose identity has been stolen, but also healthcare providers, insurance companies and taxpayers, as well as other consumers who pay higher prices for their own care as a result of theft and fraud. A primary goal of MIFA is to manage the impact of medical identity theft through stakeholder-coordinated research, increasing education and awareness, developing focused tools and procedures, promoting best-in-class strategies, technologies and practices and influencing government regulations, policies and laws. Besides CIMIP, other MIFA members include Blue Cross/ Blue Shield Association, Experian, the U.S. Department of Veterans Affairs, Kaiser Permanente, AARP and The Maryland Crime Victim’s Resource Center.

Two Utica College students Angelina Brennan and Robert Folwell have recently contributed to MIFA. The primary work that both students have done is supporting the “Best Practices” working group of MIFA. They have done this by supplementing the development and administration of a national survey of MIFA membership on the topic of industry investments in the protection of sensitive health care information. They have also contributed to the development of a national “open source” database on incidents of medical identity fraud.

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en-year veteran of the NYPD and Officer Ramos had been an officer since 2012. Both officers were assigned to that particular section of Brooklyn because they were covering shifts, and in fact, the officers did not normally cover that jurisdiction.

Professor of Practice of Criminal Justice, James Brown, feels that, “The heinous execution of New York City Police Detectives Rafael Ramos and Wenjian Liu is a gut wrenching blow to all fellow law enforcement officers, and all Americans. Their cowardly, cold-blooded murder in the name of revenge is more than counterbalanced by the corresponding outpouring of love and support for the detective’s families, and law enforcement around America; a symbol of the strength, dedication to duty, and perseverance in the face of unspeakable tragedy. Our American Criminal Justice system, based upon our U.S. Constitution, remains the best and strongest in the world.”

Professor of Practice of Criminal Justice, Gregory Walsh, believes that in light of this tragedy, policy for police across the nation will be revamped in order to secure the safety of our nation’s officers.

“While the tragic loss to the two police officer’s families and the NYPD is obvious, the executions of Officers Ramos and Liu bring far-reaching implications to law enforcement across the United States. Setting aside for another conversation the question of why a person would commit this crime, the seemingly random selection for execution of two police officers sitting in their patrol car will have every police agency from Boston to L.A., and even beyond U.S. borders, preparing new street safety protocols for officers, such as requiring more officers to travel together. While officer safety is paramount, steps such as this require additional resources, whether that be reassigning an officer from a different posting or responsibility or for the agency administrators to call in extra officers on overtime. Neither option is a good one for a community, but officers can’t be looking over their shoulders for a threat if they are to be effective addressing the issue in front of them. The new policies that are being considered are not so much to address emergency calls, such as reports of shots fired; police officers are already well trained on how to address those types of events. What may be changing is how police officers perform more routine non-emergency responsibilities, such as standing at an intersection directing traffic - or sitting in their patrol car - where they are much more vulnerable. Police cars are very visible by design, as are uniformed police officers. They are easy to find, and if officers start feeling like targets, our criminal justice system will have a big problem.”
On Saturday, November 15 the Air Force Research Lab (AFRL) Commercialization Academy Showcase was held at the State University of New York (SUNY) Polytechnic Institute in Marcy. The AFRL Commercialization Academy Showcase is a day-long event in which teams disclose business plan for commercializing AFRL technologies to investors, entrepreneurs, business leaders, and DOD members and a panel of nine judges. The final four teams total shared a $50,000 grant, the winners of the showcase, team Kognitive Systems, received the top award of $25,000 from New York State Technology Corporation (NYSTEC).

Christopher Kellogg, a current Utica College student majoring in cybersecurity and Scott Murray, New Hartford High School student, both apart of team Kognitive Systems, signed up for the Commercialization Academy. The Commercialization Academy is an experimental business start-up opportunity put together by the Start-up Strategy Group that the AFRL worked closely with to help move their technology out of the lab and into the commercial market.

Team Kognitive Systems LLC was co-founded by Murray, Kellogg, and Jake Clintsman of SUNY College of Environmental Sciences and Forestry paired with AFRL engineer Misty Blowers. Kognitive Systems and their business model focused on a software tool that uses machine learning and advanced analytics to predict critical process control events. It also allows site customization so that end users can specify high priority events to reduce the number of false alarms. The software has applicability across many domains where operators are inundated with vast amounts of information and must make timely decisions. This augmented machine learning technique keeps the operators in the loop and is the first of its kind in this industry.

Blowers created the patented algorithm and tested it, with the Kognitive Systems team, at a Syracuse paper mill for free for a few months. Hayden stated that the mill, “… cut their down time by 20 percent and saved $550,000.”

Cyber Metrics Workshop

On Wednesday, November 12, 2014, the Cyber Security Metrics Workshop was held at Griffiss Institute in Rome, NY by The Cyber Security and Information Systems Information Analysis Center (CSIAC). The CSIAC is a Department of Defense (DOD) Information Analysis Center (IAC) sponsored by the Defense Technical Information Center (DTIC). The Cyber Security Metrics Workshop is a day-long review of trends currently in policy, techniques, and tools of interest to managers and Cyber Security professionals useful in measuring certain cyber security vulnerabilities. The workshop offers an outline of current understandings of what is available and focuses on exactly what research must be completed in order to develop strong yet easily applicable techniques to evaluate cyber vulnerabilities.

The workshop featured technical papers, a panel of experts, and participated from the Air Force Research Laboratory (AFRL). Presentations were given by representatives from OSD, AFRL, PACOM, MIT-Lincoln Lab, Cyber Research Institute, Raytheon, and SRC. Associate Professor of Cyber Security at Utica College, Leonard Popyack, gave a presentation summarizing the Cybersecurity Hard Problems Workshops held in earlier on in 2014. The presentation focused on Cyber Security hard problems, the research challenges faced, and select needs in the industry. The workshops invited certain distinguished researchers and experts on the subject matter and they were briefed on cyber security challenges in diverse fields, such as defense/military, healthcare, intelligence, government, financial, transportation, medical equipment, and industrial control and power. In addition, the workshop participants produced comprehensive challenges for the cyber security field.

The Cyber Security Metrics Workshop ended with panel discussions by Richard Aldrich of Booz Allen Hamilton, Dr. Kenric Nelson of Raytheon, Dr. John Bay of Cyber Research center, and by Popyack. The panel discussion was moderated by Dr. Paul Losiewicz of Quantereon Solutions Inc.
Cybersecurity Residency

From Thursday, January 8, to Sunday, January 11, 2015, Utica College hosted its residency for the Master of Science (M.S.) in Cybersecurity Program in Sarasota, Florida. For those of you that do not know, there is a residency component in the M.S. Cybersecurity program.

The residency is a four-day program, consisting of lectures and academic sessions that are linked to a specific course within each specialization. Each student in the M.S. Cybersecurity program has to declare at least one specialization: intelligence, computer forensics or cyber operations. Day one of the four day residency consisted of capstone working sessions. The capstone project is the culminating academic experience in the program. Students are required to perform research on a cybersecurity topic and write an academic paper. Days two through four were dedicated to breakout academic sessions, in which students worked on hands-on lab exercises. Days two through four are very technical with the students loading software, working in groups, experimenting with security tools, and reporting results. The residency provides unique opportunities for students to collaborate with faculty and peers. It also builds a strong learning community that helps to strengthen and maintain students’ motivation.

Cybersecurity program director, Joe Giordano, feels that the residency gives students a chance to work with the technology in collaboration with a high quality faculty. Giordano believes that nothing is better than seeing the students meet and work with the faculty.

From the Utica College Economic Crime, Justice Studies and Cybersecurity team, Dr. Len Popyack, Professor Ish Morales, Professor Chet Hosmer, Professor Vern McCandlish and Zach Lewis traveled to Florida to assist and teach the residency courses.

Above are photos of members of the ECJSC team and cybersecurity students during the cybersecurity residency in Sarasota, FL.

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Continue reading to see a featured article submitted by Utica College to USA TODAY. This article promoted UC’s dual cyber designations from the National Security Agency/Department of Homeland Security and the Defense Cyber Crime Center. The article was featured in the USA TODAY, Homeland Security Special Edition, that was published late last year.
Two’s The Charm

Utica College first to earn dual national cyber education designations

Earning one national designation for excellence in Cybersecurity education is impressive enough; earning two is nothing less than unique.

Utica College was recently named a Center of Academic Excellence in Cyber Defense Education by the National Security Agency (NSA) and the U.S. Department of Homeland Security (DHS), as well as a National Center for Digital Forensics Academic Excellence by the Defense Cyber Crime Center (DC3), a U.S. Department of Defense agency.

At present, Utica College is the only institution of higher education to have earned both of these prestigious national designations.

“We are very proud of this distinction,” says Utica College President Todd S. Hutton.

“Utica College is only the seventh institution in the country to earn the DC3 National Center for Digital Forensics Academic Excellence designation,” says Joe Giordano, professor and director of cybersecurity at Utica College. “That coupled with the NSA Center of Academic Excellence designation – essentially the gold standard in cybersecurity education – reiterates the College’s position as a premier institution in this field.”

Like DC3, the NSA designation follows a rigorous review process that entails a comprehensive evaluation of the institution and every aspect of the cybersecurity curriculum, including all courses, assessment methods, facilities and technologies that support student learning. The agency also takes into consideration the College’s dedication to the cybersecurity field both from an academic and a technical perspective.

One of just a handful of colleges to offer a specialized master’s program in cybersecurity, Utica College recently added a cyber operations specialization to its online M.S. program and will soon introduce a new MPS degree in cyber policy, responding to critical needs for advanced skills in these areas.

The College also offers a bachelor’s degree in cybersecurity and information assurance, available both on campus and online. For more information, visit www.utica.edu/cyberdefense.
"Intermediate Data Recovery and Analysis"

On January 13 through January 16, the National White Collar Crime Center (NW3C) administered a training course in the Economic Crime, Justice Studies and Cybersecurity auditorium. The NW3C provides necessary support for the prevention, investigation and prosecution of economic and cyber-crime through research, training and investigative services. The NW3C has over 4,000 member agencies in the U.S. in addition to the 15 other member agencies in other countries throughout the world. The training was hosted by the School of Business and Justice Studies, and was sponsored by the Oneida County District Attorney’s Office and the Economic Crime and Cybersecurity Institute (ECCI). The certified course was called “Intermediate Data Recovery and Analysis”. More than two dozen law enforcement officers from all over the Northeast, ranging from federal, state and local law enforcement, attended this course. The officers, selected based on their current assignments within their agencies, qualified for this course by taking one or more prerequisite courses.

The course, which combined the skills of economic crime investigation and cybersecurity, ran for seven hours a day. What the course covered was how to retrieve data from digital media, like cell phones, laptops, etc. and how to analyze data once it is retrieved.

Professor of Practice of Criminal Justice and Director of Utica College’s ECCI, Ray Philo, said, “These skills are now vital to today’s law enforcement teams. Nearly every crime committed today has a digital component.”

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<th>OJS Update</th>
<th>Student Testimonial: Samantha Slattery</th>
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<td>Upcoming Events:</td>
<td>Utica College offered the best hands-on coursework that taught me my cyber skills and prepared me for real world experiences.</td>
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<td>State of the Oneida County Sheriff’s Office; Sheriff Robert M. Maciol</td>
<td>I always recommend Utica College’s cyber program because it’s a different major that had opened endless opportunities for me. One of those opportunities was the 2013 Cyber Internship Program with the FBI. When I interned with the FBI I worked in both the New York City office and the Albany office.</td>
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<td>Tour of New York State Emergency Preparedness Center in Oriskany, NY</td>
<td>I had a great experience working with the agents and analysts which eventually lead to my full time position as an Operational Support Technician in the FBI New York City field office.</td>
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<td>Participate in Spring Cleanup with Oneida County Office for the Aging</td>
<td>Cyber ’14 grad Samantha Slattery. Photo from linkedin.com</td>
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<td>Trip to Eastern State Penitentiary in Philadelphia and 2 Federal Prisons with Professor Dillon (April)</td>
<td>I started at Utica College in the fall of 2010. My major was Cybersecurity and Information Assurance with a concentration in Cybercrime Investigation and Forensics. Once I started my coursework, I discovered how much I love cybersecurity. It’s a unique program with professors from all backgrounds. I’ve looked at other cyber programs, but</td>
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<td>Trip to Washington, DC</td>
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<td>NYPD Ride-Along (fall ‘15)</td>
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This past December, the Economic Crime, Justice Studies, and Cybersecurity (ECJSC) academic support team launched a new academic resource for all ECJSC students. The new resource is an Engage shell titled, “ECJSC Academic Resources.” This Engage shell is intended to be the umbrella for any and all academic related questions, policies, procedures, and general resources that pertain to every program under the Economic Crime and Cybersecurity Institute (ECCI). Within the shell that all ECJSC students have access to, lies information regarding program requirements, copies of the college catalog, any academic form that a student may need throughout their adventure at Utica College, sample syllabi of our courses, along with general FAQs that students often have. Also, students will find a resource link section that lists great (online) resources for any student pursuing a degree in cybersecurity, fraud, or criminal justice. These links can be used to search for jobs and internships, to keep up on current events, or for general research purposes.

One new and valuable resource that has been posted is a link to our newly created LinkedIn group titled, “ECJSC Student Internship/Job Network.” The new LinkedIn group is intended for all ECJSC undergraduate and graduate students, faculty, alumni, and industry professionals to network with each other and potential internship sites and employers. Faculty and students are urged to inform hiring managers within their organization of this LinkedIn group. Whether a student is of freshman or senior standing, they are welcome to be a part of this networking opportunity, as it is never too early to begin the internship or job search. The intent of this group, is to not only provide students with a valuable resource in which they can search for opportunities, but also to provide our industry partners with a direct avenue to ECJSC students that are looking to join the job market. From the time this group was created, we have already had great success with students and employers posting internship and job opportunities within their organizations. The academic support team urges all ECJSC students to join the group.

Aside from serving as the umbrella for any and all academic related questions, and a great resource to begin your search for internship and job opportunities, the ECJSC Academic Resources shell will also serve as an avenue for the academic support team to get announcements out to all students.

The above QR code will direct you to the ECJSC Student Internship/Job Network.

From everyone on the ECJSC team,

Happy New Year

This year believe in yourself and achieve everything you deserve.

2015