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FBI SPECIAL AGENT TIM RYAN (KEAN, '92) CYBER INVESTIGATIONS TALK

Kean University's Department of Computer Science, in collaboration with the Criminal Justice department hosted a presentation by Mr. Timothy Ryan (pictured above), Supervisory Special Agent for the Cyber Investigations Squad of the Federal Bureau of Investigation (FBI) and Mr. Michael Quinn, FBI special agent and digital forensics expert, on Thursday, April 8, 2010. Over one hundred faculty and students crowded into Kean Hall to hear about the professional career paths of Mr. Ryan and Mr. Quinn, and the importance of technology to today's global law enforcement environment.

Ryan, who joined the FBI in 1999, is responsible for investigations of computer intrusions and hacking, computer crime, child pornography and intellectual property. He discussed the importance of technology and science in fighting crime. The convergence of law enforcement and information technology was made clear during the talk. Throughout the presentation, Ryan and Quinn, a full-time digital forensic examiner, answered questions from the students and faculty in attendance.

For more information about a B.S. in Computer Science or a B.S. in Information Technology, with a minor in Criminal Justice at Kean University, visit www.kean.edu/~compsci.

SEE HOW THEY RUN AND TURN AND SPIN!

Robotics Course Offering Debuts

Dr. Jack Ryder and his students are busy building and testing their robots. This fall, students in Dr. Ryder's Tech 4440 Robotics class are learning the ins and outs of industrial robots – literally, as the robots which the students have built are seen going in and out of classrooms in Hennings Hall. The activity is particularly busy on Wednesday afternoons, as students gather to finalize their weekly projects before class. Given the success of this course, Dr. Ryder is developing a two-course sequence in Robotics, in which the first course will be offered at the sophomore level.

Dr. Ryder will be teaching CPS 3910 IT Project Management during Spring 2011. In addition, he will be offering CPS 4951/Tech 4513 Spring 2011, which is the CS and IT capstone course for graduating seniors. In the capstone, design elements from the entire 4-year curriculum are brought together in a culminating project. TECH 4440 is offered every other fall, so plan your schedule to join Dr. Ryder in Fall 2012!

Dr. Ryder and his Robotics students are pictured below. Standing (L to R) are Wayne Ritchie, Joe Roman, Dr. Jack Ryder, La-Juan Hartsfield, Jose Gerena, and Ibtisam Ali. Kneeling (L to R) are Jay Patel, Michael Dores, and Omar Arguello.

STUDENT AWARDS

Ibtisam Ali (CS '11) was inducted into the national honor society of Phi Kappa Phi during the Spring 2010 induction ceremonies held at Kean University on April 23, 2010. Ms. Ali was recognized for her academic accomplishments, as demonstrated by being one of the highest academic achievers at Kean University. In front of an audience of about 550 family, friends, and Kean faculty, Ms. Ali received her commendation.

The Honor Society of Phi Kappa Phi is the nation's oldest and most selective all-discipline honor society. Membership is by invitation only to the top 7.5 percent of second-semester juniors and the top 10 percent of seniors and graduate students.

In addition to her coursework, Ibtisam presented her research at Kean University's Spring 2010 Research Day. Her research has been supervised by Prof. Lee Wittenberg and Prof. Michael Halper.

Marvin Andujar (CS/Math '12) spent the summer at Clemson University, in Clemson, South Carolina, where he worked in Dr. Juan Gilbert's Human Computer Interaction Laboratory. Marvin has developed a poster of his summer research work, titled "Brain Computer I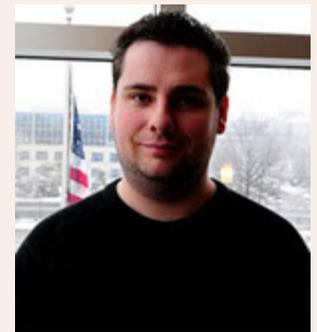nterface", which he will present at the *Society of Hispanic Professional Engineers Conference (SHPE '10)* to be held in Cincinnati, Ohio Oct. 27-31, 2010. Marvin presented an earlier research project on carbon sequestration last year at SHPE '09, which was held in Washington, D.C.

Johana Callegari (CS '11) was selected as a winner of the Kean University Phi Kappa Phi award for Outstanding Undergraduate Projects in Science and Technology. Phi Kappa Phi is an honor society, which recognizes academic accomplishment from all disciplines. Johana received the 2nd place award for her paper "Assessment of the Utility of Tag Clouds for Faster Image Retrieval", which she presented at the 11th ACM SIGMM International Conference on Information Retrieval (MMIR '10) in Philadelphia, PA, March 29-31, 2010.

Frank Kendall (Math/CS '10) was also recognized by Phi Kappa Phi and received 1st prize for his paper "SPF-Net: A Scalable Protocol for Flexible Sensor Networks", which he presented at the 33rd IEEE Sarnoff Symposium, held in Princeton, NJ April 12-14, 2010.

Frank received additional recognition for his research in April at Kean University's Research Day, an annual event which celebrates all student research at Kean. Frank was selected to receive Kean University's Outstanding Undergraduate Researcher Award for 2010. This was the second consecutive year that a Department of Computer Science Undergraduate has been recognized with this honor.

Swetha Medicherla (CS '10) graduated in May and has begun her graduate students at NJIT in Computer Science. While at Kean University, Swetha was a McNair Scholar, and was recognized for her high academic achievement at the annual Honors Convocation at Kean University in April.

Swetha conducted research as an undergraduate with Dr. George Chang, and published several papers. Her paper "Visualization for Increased Understanding and Learning using Augmented Reality was presented at the 11th ACM SIGMM International Conference on Multimedia Information Retrieval (MIR '10) in Philadelphia, PA in March. A later paper, "Applications of Augmented Reality Systems in Education", was presented at the *21st International Conference of the Society for Information Technology and Teacher Education (SITE '10)*, held in San Diego, CA, March 29-April 2, 2010. Her research addresses the design and assessment of augmented reality learning environments for education.

Brian Sinnicke (CS '10) was recognized for his academic accomplishments and community involvement by *Who's Who Among American College and University Students 2010*, which will including his biography. Brian, an NSF scholar while at Kean, is also a triathlete and has participated in and raised funds for charitable causes through his mastery of swimming, biking, and running competitively, while maintaining his academic studies. While at Kean, Brian also participated in undergraduate research projects with Dr. Morreale, resulting in a journal publication.

HANAN AND HER GLOVE

Hanan Teleb, a graduate student in the Department of Computer Science, has been working on integrating a data glove with a 3D virtual environment. Hanan's data glove is a reasonably priced, highly wearable device which could be used to track and execute actions in a 3D environment, such as those used for gaming or immersive learning situations. Her work on the data glove is an important feature of the emerging research associated with Kean University's recent NSF grant to install a CAVE, a 3-walled automatic virtual environment. Hanan's work, conducted under the supervision of Dr. George Chang, includes the design and testing of code to translate data glove motion into action in the 3D virtual environment. Dr. Chang is co-PI on the NSF CAVE grant.

FACULTY NOTES

Dr. Francine Abeles published *The Pamphlets of Lewis Carroll: The Logic Pamphlets of Charles Lutwidge Dodgson and Related Pieces* with the University of Virginia Press in July 2010. Charles L. Dodgson, better known as Lewis Carroll, was both a mathematician and a literary figure. This book is the fourth volume in a series focusing on Dodgson's writings on logic.

Dr. George Chang attended the *IEEE Virtual Reality Conference* in Boston, MA in April 2010. Several virtual reality environments were demonstrated at this conference, which Dr. Chang is considering adapting and using at Kean. With his graduate student, Hanan Teleb, research is underway on virtual reality using the data glove and augmented reality.

Professor Emanuel Emanouilidis continues to extend earlier published work on Latin Squares.

Dr. Jing-Chiou Liou and Sujith Bhashyam (CS '11) attended the *2nd International Conference on Software Engineering and Data Mining (SEDM 2010)* held in Chengdu, China, on June 23-25, 2010. In addition to serving as Session Chair, Dr. Liou's paper " A Feasible and Cost Effective Two-Factor Authentication for Online Transactions, co-authored with Sujith, was presented at the conference. Dr. Liou and Sujith have also co-authored a paper which will appear in the International Journal of Advancements in Computing Technology.

Dr. Stanley Lipson has incorporated Scratch, a programming language, in his ID 1400 course. Scratch is billed as a "programming language for everyone" with drag-and-drop features, making it idea for creating 2D animations and games. Initial response from the students has been very positive.

Dr. Patricia Morreale co-authored "Real-time Environmental Monitoring and Notification for Public Safety" in *IEEE Multimedia* (April-June 2010) with Professors Feng Qi and Paul Croft of Kean's Department of Geology, Meteorology, and Earth Sciences, and undergraduates Ryan Suleski (CS '10), Brian Sinnicke (CS '10), and Frank Kendall (Math/CS '10). The research was funded by a SpF grant from Kean University.

Dr. Jack Ryder is teaching a graduate course in simulation this fall. This course builds upon both mathematical and computing foundations from the undergraduate curriculum.

Professor Dennis Santomauro continues his outreach to mathematics and science educators in New Jersey. During informal discussions with New Jersey high school and middle school faculty over the past year, the importance of computational thinking and computer science education before college continues to be of primary important to Professor Santomauro. With department colleagues, a curriculum for teacher workshops and professional networking opportunities is being developed for secondary teachers.

Professor Carolee Stewart-Gardiner and Swetha Medicherla (CS '10) created a distributed application for a publishing company during Summer 2010, which is now being used in Distributed Systems (CPS 4931) Fall 2010. In addition, Professor Stewart-Gardiner attended a workshop on "Preparing for ABET Accreditation" held at the University of Kentucky in July 2010 as part of Kean University's Department of Computer Science preparation for ABET accreditation.

Dr. Kung-Kuen Tse continues his work on combinatorial problems and supervising student programming teams for the annual ACM regional programming contest.

Professor Lee Wittenberg is the Technical Director for the Greater New York Regional ACM Collegiate Programming Contest, to be held at Rutgers University, New Brunswick, NJ on October 24. 2010. In addition, he has held two Programming Contest Workshops for Kean students participating and interested others, in preparation for the ACM contest.

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SUMMER INTERNSHIPS

Marvin Andjuar (CS '12)
Human Computer Interaction (HCI) Lab
Clemson University
Clemson, SC

Christian Bermeo (IT '12)
Novartis
East Hanover, NJ

Rob Ferguson (CS '11)
Data Reduction Systems
Union, NJ

Ray Tucci (CS '11)
Data Reduction Systems
Union, NJ

ALUMNI NOTES

Nick Doell (CS '08)
Verizon Wireless
Warren, NJ

Julio Rodriguez (CS '07)
MetLife
New York, NY

Cesar Rojas (CS '06)
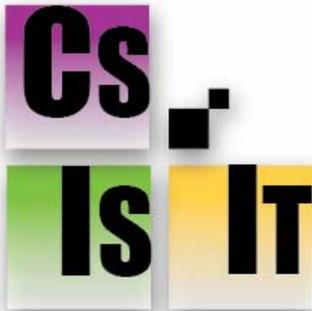*Verizon Communications*
Basking Ridge, NJ

Ignacio Segovia (CS '10)
NorthPoint Solutions
New York, NY

Mike Sigle (CS '04, M.S. '06)
Napa Group, Inc.
New York, NY

Ryan Suleski (CS '10)
Rosetta Interactive Media
Princeton, NJ

Sultan Syed (CS '93)
CIGNA Healthcare
Hartford, CT

Adrian Yu (CS '08)
St. Barnabus Hospital
West Orange, NJ

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