On behalf of the department, I am delighted to welcome you to our Spring edition of the Offline Observer. With the start of a new year and a new semester, it is time to reflect and make plans for the future. The year 2014 was a successful year for the Department of Computer Science as we had many noteworthy accomplishments:

1) Our undergraduate and graduate programs maintained their high quality, with many of the students involved in experiential learning opportunities such as internships, peer tutoring at the Learning Resources Center, and teaching assistantships.

2) We continued with the quality assessment of the undergraduate Computer Science program in order to maintain our ABET accreditation status.

3) In order to better prepare our students for the high demands for IT specialists in the job market, we created a new undergraduate program, Information Technology.

4) Our undergraduate students were involved in the ACM Programming Contest, which was held in November, and they are already making plans for the next year’s contest!

5) Many of our students were involved in independent research projects, some of which have resulted in publications in scholarly journals and conferences.

The long-term success of the department ultimately depends on careful planning in order to maintain high standards in both teaching and research. To that end, we will embark upon new initiatives:

1) In the new Invited Speaker Series, our students will be kept abreast of the latest research developments in academia as well as industry.

2) To pursue joint educational opportunities, new international academic partnerships with other universities will be initiated.

3) Plans are under way to create a new online Master’s of Science program in Web and Database Technologies.

4) Our Industry Advisory Board members have been very supportive of the department in the past, and we will continue to seek their expertise in the coming year and also target new members.

We are committed to making this year a success with even greater accomplishments and wish you all the best success in 2015.

~ Babak Forouraghi, Professor and Chair
How do I say goodbye to SJU after a 33 year history?

I transferred into this department in 1982 as an undergraduate CS major (back then my last name was Can). After my first year, I was hired as a lab assistant. Back then, there were no PCs; only one room with dumb terminals on the ground floor of Barbelin. I graduated in 1985 and moved to Istanbul, Turkey and worked in Bosphorus University’s IT department. I then came back to the US and in 1991 began my Master’s in CS. While a Master’s student, I was also a teaching assistant, and was responsible for teaching a one-credit Basic programming course to undergrad science students. I have to give a shout-out to two professors who have so influenced me in my life: Dr. Gary Laison (still in the Math department) and Jonathan Hodgson (Professor Emeritus of the CS department). I graduated in 1993 and shortly thereafter, I started working in the IT department as a Programmer/System’s Manager. While working on the ground floor of Barbelin, I would sometimes climb the two-flights of stairs to teach courses in the CS department as an adjunct. I left the IT department in 1996, though I would still teach a course once in a while. Then in 2001, I came to SJU as a full-time faculty member. I’ve often joked that I’ve held every position at SJU except President. Now that we have the first non-Jesuit President, who knows...

I have absolutely loved my time at SJU. It has been such a big part of so many stages of my life. My children grew up with me working in the “castle”. I met my husband at SJU almost 20 years ago. I’ve made some very good friends here. But my favorite time at SJU has been as a faculty member. I think Confucius said it best, “Choose a job you love and you will never have to work a day in your life.” (Ok, except for grading; I HATE grading). I am really going to miss teaching and my interactions with the students of our department. I love teaching freshman and seeing the “aha” moment when they “get” programming. I love teaching the mathematical courses and once in a while (Ok, REALLY once in a while), help a student fall in love with the beauty of computer science. I love being a “mom” to so many of our grad students who are far away from home. I feel so proud when I’ve made a difference in a student’s life. I can’t imagine doing anything else as a career – it has been so satisfying.

So leaving now is very bittersweet. I’m excited to start the new chapter in my life (if you’re ever in Florida, look me up!), but at the same time, I will miss SJU and all that it encompasses. Thank you all for allowing me to have the best job in the world.

Suzan Koknar-Tezel
Congratulations to Dr. Babak Forouraghi, the new department Chair and Graduate Program Director!

We welcome Ms. Emily McGovern to the department! Emily is freshman work-study, majoring in Sports Marketing.

Many thanks to Christine Anderson, for assisting the department this academic year with the newsletter, heading the Computer Science Club, and helping with department events. Christine graduated on May 16th and we wish her much happiness and success in the future!

The department’s new website is up and running. Check it out at http://cs.sju.edu/.

New brochures are being created and printed for both the undergraduate and graduate programs!

The department sadly bids farewell to Dr. Koknar-Tezel. She and her husband, Dr. Ahmet Tezel (HSB), are retiring to Florida. A Farewell Reception was held at Landmark on May 11th and on May 13th, the graduate students organized a pot luck lunch in her honor.

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**Club Notes**

**News from the Computer Science Club**

**COMPUTER SCIENCE CLUB**

Open For All Computer Science Majors!

The Computer Science Club has been busy these last two semesters—this includes voting in Justin Lujan as our new Treasurer and Brendan Szefinski as our new Secretary. We have continued our volunteer service program of Computer Buddies at the Wynnefield Free Library—devoting a few hours a week in instructing library patrons in basic computing skills. Additionally, we have once again completed another large event involving the Video Game Tournament in March. We had a terrific turnout as members (and guests) played matches of video games on the TVs in The Perch, enjoyed pizza (courtesy of the Computer Science Department), played music on the stereo in The Perch, played pool & ping pong, and designed artwork with computer science motifs for the labs in the Department. We had a fantastic year for the Club and have much to continue to look forward to for the next term!!!

* Christine Anderson
President

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**Officers for 2015-2016**

**President** - Brendan Szefinski

**Vice President** - Justin Lujan

As in the past, the Treasurer and Secretary will step up to fill the President/Vice-President positions. In the Fall, students will vote for the new Secretary & Treasurer. If anyone is interested in these positions, please contact the department (csci@sju.edu).

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**EYE ON IT ➔ The Importance of Big Data**

According to Dale Neef, author of _Digital Exhaust_: “Big Data is all about analyzing huge data sets to understand things in new ways — by using powerful computers to analyze a wide variety of source data to reveal hidden correlations and patterns in data.”

As an example, hospitals looking after premature babies now can capture data in real-time on every breath and heartbeat of the babies being cared for. All that data can be analyzed to predict infections 24 hours before a baby shows any visible symptoms.
Student Screenshots

2014-2015 Internships

Patricia McGann (Lockheed Martin, King of Prussia)

As cliché as it sounds, I knew that Saint Joe’s was where I wanted to spend my next four years the first time I walked around the campus. Now as I begin my last semester and am on the verge of graduating with a degree in Computer Science and Mathematics minor, I’m glad I trusted my gut. Computer Science never crossed my mind as a potential career path when I arrived at Saint Joe’s, but after taking a Computer Science I and II with Dr. Grevera my freshman year, I fell in love with it. The Computer Science department may be small, but I personally feel that has only ever been a benefit to me. I feel like I have a real relationship with my professors and that they not only want me to get a good grade, but truly understand the difficult concepts. My classes focus on preparing us for the fast paced, exciting field of technology so we can be successful in our future careers.

Last summer, I interned with Lockheed Martin as a College Intern Tech Spec. My task was to create an internal mobile application to be used by all the employees at Lockheed Martin. Over the summer, I worked closely with the project lead on the research, design, and development of the app. As part of the intern experience, I was able to learn about and visit the various sections of the company and hear from employees about their careers and projects. While my classes gave me the background to be successful in my internship, my time at Lockheed Martin gave me a focus for my senior year, real life experience in a workplace, and the desire to learn more. After graduating, I will be returning to Lockheed Martin as a Software Engineer Associate and continuing to create more mobile applications for them.

Before graduation however, every senior Computer Science major must complete a senior project. For my senior project, Dylan Leonard, a fellow Computer Science major, and I will be working closely with the CS Department to create a secure and easily accessible website for the department to collect information from alumni and for alumni to update their information. The website will provide the CS Department with a more efficient way to consolidate and analyze data for recruiting purposes. I look forward to being able to combine what I have learned in the classroom and at my internship to fulfill this need for the CS Department.

Xiaoyan Zhang (Drexel Library, SJU)

Since 2014 summer, I have worked at the Drexel Library as volunteer, adapting some open source to improve the library search system. This semester, the library systems manager invited me to work on the library indoor map project with him. As a web developer, this is the first project in which I fully participated. I learned how to use Adobe Illustrator to draw the library map, and how to generate SVG files which we can embed in the HTML to create interactive map. During the developing process, we also did several attempts about web design, like responsive design, cross-browser compatibility, and web performance improvement. I gained a lot of valuable hand-on experience about web development. I am also glad that I had the chance to make some contributions to our library.
2014-2015 Internships (continued)

Krzysztof Kurzyna (Arris Group Inc.)

My Internship was at Arris Group Inc. Arris Group Inc. is a telecommunications equipment manufacturing company that provides cable operators with high-speed data, video and telephony systems for homes and businesses. My internship was in spring 2015. My involvement was in the data and video service integration part of the business. The Main part of my internship revolved around performing integration between multiple software systems. Integration is the function of two pieces of software communicating with one another either using third party translation software or a direct driver integrated in the software. The software we integrated with was the ARRIS Converged Edge Router (E6000) and the skyline Dataminer. The E6000 is a converged Edge Router. It is physical hardware which enables the conversion between RF (Radio Frequency) and IP. This main hardware allows home/business users to connect to the internet through an ISP such as Comcast or Verizon. Skyline Dataminer is an open piece of software written in Microsoft Visual Studio. DataMiner has the capability to monitor data from any device. It can then display trending information and is able to show user trends and diagnostic information about any type of device. The main use for DataMiner is SNMP tracking, but it can also perform any basic access functionality to any device using protocols such as SSH, TELNET, Serial Connections to perform specific tasks. The main task of my internship was to interact with the two groups and our customer to create the specific requirements which needed to be integrated between E6000 and DataMiner. I communicated with both groups to create rules, SNMP OID monitors, trap lists, GUI layouts for the DataMiner Agent (DMA).

This was the main part I helped to contribute in the entire phase of the project. I had also assisted in multiple training sessions to help explain the current project. My purpose was to introduce new employees to the team, bring them up to speed on their purpose of the current project and assign lab work for testing preparation. Also, prepare them for the testing phase and assist with creating test cases to run against the upcoming integration between the systems.

“An internship is a great way to network and make connections.”
~ Anonymous
Research Presentation

In his presentation, Ather Sharif discussed web accessibility and its benefits, and showed a demonstration of a jQuery plugin that allows graphs to be readable to people with vision impairment.

Ather is the Founder and Researcher at EvoXLabs and SCI Video Blog and is currently pursuing a graduate degree in Computer Science at Saint Joseph’s University. He is a software engineer, freelance web developer and consultant, and is passionate about researching Web Accessibility and developing jQuery tools to make the web a more accessible place. He's in love with Philly and is a huge fan of the Eagles. Apart from doing all sorts of nerdy stuff, he also volunteers at Magee Rehabilitation Hospital, loves drinking Frappuccino’s, and is crazy about Ninja Turtles.

Senior Project Presentations

Nathan Otto and Clay Smith (recipients of the best Senior Project Award) created a web as well as a mobile app called GradeKeeper, which allows students to keep track of their grades and progress in the classes they take.

Matthew Karliner and Joseph Shewaski created an Android game called Cosmic Slayer, whose main objective is to destroy asteroids that randomly appear on the game board.

Patricia McGann and Dylan Leonard created a web application called “Oh, The Places Hawks will Go!”. The purpose of this work is to allow the Computer Science department to effectively keep track of the CS graduates and students who do summer internships.

Stefan Tanenbaum and Jacob Mulinge created an Android app called “Free Parking App” which allows students and staff to find vacant parking spots on campus.

Alex Black and Christine Anderson designed an Android voice-activated personal assistant called Steve(). Steve() is capable of executing several commands, such as Search, Calculate, etc.

If we knew what it was we were doing, it would not be called research, would it?”
~ Albert Einstein

Graduation Awards

Particia McGann received the 2015 Computer Science Award. Patty is a member of the Upsilon Pi Epsilon Honor Society, Vice President of the Computer Science Club, and a volunteer at the Free Library of Philadelphia with other members of the Computer Science Club, teaching patrons computer skills. Last summer, Patty interned at Lockheed Martin and created an internal mobile application to be used by all the employees at Lockheed martin. Patty will be joining Lockheed martin as a Software Engineer Associate in June.

Xiaoyan (Elaine) Zhang received the 2015 Computer Science Graduate Award. Elaine graduates with a concentration in Web and Database Technologies and her academic performance in her area of specialization has been outstanding. During her last semester of studies, she interned at the Drexel Library where she designed a web application to help users find information about library resources, such as availability and location of study rooms, book call numbers, and the installed software packages on various computers across the library. As a Graduate Assistant in the department, Elaine’s work performance was exemplary.

Congratulations, Patty and Elaine!
Spring Events

Tuesday, February 10
Computer Science Club Meeting

Thursday, February 12
Patricia Hasson (B.S./2002, M.S./2004): Guest Speaker from Lockheed Martin. Patricia will speak about the Computer Scientist’s role in weather predictions.

Thursday, March 26
Ather Sharif: Ather, a first-year graduate student, will present information on his new initiative, EvoXLABS

Friday, March 27
Computer Science Club’s Video Game Tournament

Thursday, April 9
2015 Upsilon Pi Epsilon (UPE) Inductions

Thursday, April 23
Student Internship Presentations: Krzysztof Kurzyna & Xiaoyan Zhang

Thursday, April 30
Senior Project Presentations

Saturday, May 16
Commencement

Student Screenshots

* A special recognition goes to Ather Sharif, a first-year Computer Science graduate student. Ather became a quadriplegic due to a car accident in 2013, but he has not let this disability hinder his abilities. In January, he launched EvoXLABS, which provides improved web experience to people with disabilities. Ather is also the recipient of the Patient Recognition Award at Magee Rehabilitation Hospital in Philadelphia. Most recently, he was awarded a $10K Google Scholarship, which will go toward his tuition next year and gives him the opportunity to visit Google in Mountain View, CA, in June. Ather also works for the Computer Science Department as a tutor. Congratulations, Ather!

* Abrar Alrumayh will continue her education in the Computer Science PhD Program at Temple University.

* The Upsilon Pi Epsilon (UPE) Induction Ceremony was held on April 9th. Congratulations to the following 2015 inductees:
  
  FACULTY
  Mary Krueger

  GRADUATE STUDENTS
  Abrar Sulaiman Alrumayh
  Mohmmad Alsubaie
  Ather Sharif

  UNDERGRADUATE STUDENTS
  Christine Maxine Anderson
  Sarah E. Cooney
  Jimson J. Mathew
  Patricia K. McGann
  Luigi Nunez

* Devin McDermott (B.A./2011) graduated with a master’s degree in Computer Science on May 16th and has been working in SJU’s IT Department. Beginning June 1st, he will start a new position as a “Development Support Engineer” at Lenovo in Raleigh, NC. He was also offered positions at Boeing, IBM, BNY Mellon, PNC, and Google flew him to their headquarters in Mountain View, CA for an interview. We wish Devin and his family all the best!
Brian T. Blair (B.S./1986)  Brian left the corporate world a little over one year ago and has not looked back since! He purchased the Old Manse Inn, a 12-room Bed & Breakfast on beautiful Cape Cod. He enjoys the opportunity this brings to meet people from all over the world! If you are ever in the Cape Cod area, please stop in to say hello! (http://www.oldmanseinn.com/)

Brendan K. Collins (B.S./1985)  Brendan has spent the last 27 years practicing environmental law at Ballard Spahr LLP in Philadelphia. For the past several years, his practice has focused on the electric power sector, in particular the use of cost and emissions modeling in developing market-based air pollution regulation. He is currently representing clients in the United States Supreme Court and the US Court of Appeals for the District of Columbia Circuit.

Julia (Fox) Gerlach (B.S./2007)  Julia, her husband, big sister Marie, and big brother Joey welcomed baby Lucy Elizabeth Gerlach, on December 3, 2014.

Jeff Humphry (B.S./2010)  Jeff is currently lead developer and senior application architect at “Health Care Clinics at Select Walgreens”. This division of Walgreens provides the electronic medical record (EMR) software used by the clinics located in Walgreens drug stores. The company is based in Franklin, TN - just south of Nashville - and Deerfield, IL (Walgreens corporate headquarters). Jeff works from Exton, PA and has been with Walgreens for two years.

Banu Kutla (M.S./2014)  Upon graduation in December, 2014, Banu started working as an Applications Developer at Drexel University.

Paul Maurer (B.S./1984)  Paul is currently the System Director Applications in the I.T. department for Main Line Health System, which includes Lankenau, Bryn Mawr, Paoli, and Riddle hospitals as well as the Bryn Mawr Rehab and Mirmont facilities. His team supports a wide variety of clinical and financial applications that support clinicians and business users across the health system. Paul credits the encouragement he received in Dr. Gary Laison’s many Pascal (remember Pascal?..OK it was 1984!) courses with helping him get started in the IT field.

Angela Pawlowski (B.S./1986, M.S./1989)  Angela (Upsilon Pi Epsilon member) is the Director of Strategy & Business Development at the Lockheed Martin Advanced Technology Laboratories in Cherry Hill, New Jersey.

William C. Regli (B.S./1989)  William Regli, PhD, is Professor and Senior Associate Dean for research in Drexel University’s College of Computing & Informatics. He is presently serving as the deputy director of DARPA’s Defense Sciences Offices. For further information, please visit: http://drexel.edu/cci/about/press-room/news/2014/August/drexel-cci-professor-william-regli-appointed-to-darpa-dso/

Please keep us posted! Send your updates to csci@sju.edu or visit our facebook page!

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