2013-2014 Newsletter

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School of Computing Class of 2013
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Dear Friends,

This fall we welcome on campus the class of 2017. In the School of Computing, over 120 frosh will populate and enrich our classes, our labs, and our lives during the coming academic year. This number is approximately twice the size of last year’s incoming undergraduate cohort. The increase in enrolment is due primarily to a recognition of the excellence of our School, to the outstanding efforts of our wonderful volunteer faculty, staff, and student recruiters, and to the superb work of the University’s Admissions Office.

The enrolment rise can also be attributed to a renewed interest in Computer Science, and an appreciation of the important place Information Technology occupies in every facet of our society, be it education, health care, communications, finance, manufacturing, or entertainment. One can only hope that our decision makers will in turn acknowledge the crucial role played by Computer Science, and proceed to make it a required subject in our high schools.

In closing, I am happy to note that this academic year 2013 – 2014 is the 45th in the life of the Queen’s School of Computing. Festivities are being planned to celebrate this milestone, and I look forward to your participation. Thank you for your continued support.

Very best wishes for 2014,

Selim G. Akl
Professor and Director
School of Computing
Queen’s University

DEAR ALUMNI AND FRIENDS,

It is an honour to be able to address everyone as the new President of the Computing Students’ Association. Working with those people who made the School of Computing what it is today is an incredible privilege. Allow me to describe for you the ongoing activities of the 2013-2014 year.

Beginning with Orientation Week, we already have some good news! This year, we have an increased number of first year students coming in. This meant that the Tech Committee had to work extra hard to welcome the Class of 2017 with what was an amazing week.

Continuing from last year, the Alumni and Guest Speaker programs will be ongoing. This is a prominent event where students will be able to see the real life applications and opportunities their degrees will afford. If you would like to be a part of the Alumni Speaker Program and speak to current students about your experiences and career, please feel free to contact me at any time.

Speaking of Alumni, this year Homecoming will be returning to Queen’s University, and we have been planning a special event! Annual events continue, such as the Semi Formal, the End of Year Banquet, our Annual LAN Party, Weekly Coffee with Profs, The Buddy Program, Internship Talks, Secret Santa Pot Luck, Trivia Night, and many more. Also, there is on-going participation in various conferences such as CUSEC, DOT, ONCWIC, and CS Games.

We have been working very hard to get COMPSA Site Services fully up and running, and with the new management team, I am sure that this will be a successful year for CSS. For anybody wondering, COMPSA Site Services focuses on Web Design, specifically making Web Sites for various groups throughout Queen’s. This is a great service for us because it will help us build and strengthen relationships with many different faculties, clubs and student initiatives, and it also allows our students to build experience in a specific field.

This year’s council is an amazing group of students who are very excited in bringing you and our students a spectacular year! Our main objective: to maintain and build the Computing family we have all grown to love. Cheers!

Sahib Purba
COMPSA President
Greetings from the GCS

The Graduate Program in the School of Computing is one of the largest at Queen’s with more than 100 M.Sc. and Ph.D. students. To represent them, the Graduate Computing Society (GCS) has been established and is run by the GCS Council. The council looks after the interests of its members using various formal and informal activities inside and outside the School of Computing. Students are formally represented by participation in committees in the School and in the Society of Graduate and Professional Students (SGPS). Besides that, GCS organizes a variety of professional and social events.

The biggest of our initiatives is the Queen’s Graduate Computing Society Conference (QGCSC), which in 2013 was chaired by Eric Rapos, Layan Nahlawi and Shady Khalifa (with the great help from David Sears, Doug Martin, Cheryl Savery, Melissa Trezise, Rizwan Mian, Roman Suvorov and Sherin Abdel Hamid).

QGCSC 2013 was very successful with more than 70 participants and guests, and two days of talks, panels, seminars and social events. This conference is very important for us, because it enables our graduate students to present their research in a friendly environment, to learn networking and to showcase the exciting research that takes place in the School. We hope that the next edition of QGCSC in 2014 will again be a great event.

The GCS is very keen on improving social ties within the School and on making the School a fun and friendly place for everyone. To achieve that, the GCS organizes many social activities: coffee breaks (in summer with ice cream), a welcome event for incoming students, a Holiday party, board games days, movie nights and many other activities. We try to reach out to all students so that they can participate in an activity or service.

On behalf of the GCS,

Karolina Zurowska

GCS Council for 2013-2014 is Eric Rapos, Ben Cecchetto, Nasser Alsadhan, Francisco de la Parra, Saeed Shafieian, Thomas Vaughan, Doug Martin, and Phoena Pang

Hello All,

It is an honour to write to you as the incoming GCS President. As someone who has been deeply involved in the School of Computing for many years now, I can say that I am excited to do great things with GCS this year. I would also like to thank my predecessors, Roman Suvorov (last year’s Co-President) and Karolina Zurowska (a Co-President last year and the President the year before) for all of their hard work; they provide some big shoes to fill, but I am up to the challenge with the help of my Vice Presidents, Ben Cecchetto and Nasser Alsadhan, along with our recently elected Council. Once again, we were able to assemble a dedicated group from the pool of excellent graduate students in the School of Computing, and we will be working with some great people.

The Council has discussed some plans for the year, and one of our goals this year is to increase the number and variety of events offered by GCS in hopes of drawing an even larger crowd to our events. We also hope to increase our web presence this year with more event photos, being more active on social media (Facebook: https://www.facebook.com/queensgcs) and keeping the website (http://queensgcs.ca) up to date. Additionally, we would like to raise the profile of Computing within the larger community of graduate students at Queen’s. As the largest body of grad students, we should have the largest voice on campus. Lastly, we would like to assist the new Conference leader in planning this year’s conference in whatever way we can, and continuing with the great tradition that is Queen’s Graduate Computing Society Conference (QGCSC).

Eric Rapos
Dr. Bob Crawford reflects on 43 years of service

Below is an excerpt from an interview which can be found at:
cs.queensu.ca/interviews/2013/rgc

After 43 years at Queen's as scientist, administrator, adviser and instructor, Dr. Bob Crawford is retiring. Dr. Crawford got his BSc in engineering at Penn State in 1967, and his M.Sc. and Ph.D. at Cornell University.

In his many years at Queen's, Bob has been recognized by his colleagues and students as an outstanding teacher and friend to Queen's. He won the Alumni Award for Excellence in Teaching, Queen's University – 1985; The Michael J Rodden Award, Queen's University Athletics – 2004; Award for Service, Canadian Association of College & University Student Services – 2005; Recognition Award, Student Affairs and Service Association, Canada – 2005; Distinguished Service Award, Queen's University – 2006.

In 1972, he began teaching at what was then the Department of Computing and Information Science. After several years of research in the department, he turned his attention to Queen's administration, which he devoted himself to for the next 20 years, with occasional forays into teaching and supervision. Dr. Crawford held the title of Associate Dean in Arts and Science for ten years, as well as a short stint as Director of International Studies at Herstmonceaux. For another ten years he was Dean of Student Affairs. Since his return to teaching in the School of Computing in 2005, he also chaired the organizing committee for the World University Cross-Country Championship, while holding a continuing interest in social, legal and ethical issues. Bob also recreated CISC 081/P81, which hadn’t been offered for some years, and is now offered in both terms.

Then and Now; “One remarkable change is our presence, the space of Computing on Campus. In 1971 we occupied small quarters in the Rideau Building, now home to Physical Plant Services. Goodwin Hall opened as the mining building and we moved in 1972 to the fifth floor. Just the fifth floor. Now we occupy space on the second, fourth, fifth, sixth, seventh, as well as the third floor of Walter Light Hall. We’ve grown to other buildings to accommodate the labs of our world-class researchers and faculty members. We began with no Doctorate program; now our PhD program is world renowned.

“Research was mainly operating systems, databases, storage and retrieval, and main frames. There was some application research — computer music for instance, but it was more core computer science; the very foundations of application areas like biomedical, gaming, and graphics, which came later.

“I was mainly into information retrieval and storage. Two years into my administrative career, I attended Hypertext’87 in Chapel Hill, North Carolina. There were only about 100 people there for the first conference on hypertext which, of course, became the Web. In 1987 the discussions were on the size of a web page—Did people want to read a screen and then click? Or scroll? Turns out they wanted both. It was a neat thing to be in on the ground floor of what became the Web, and I often wonder how different life would have been had I chosen that route instead of becoming a university administrator.

“The personal computer arrived—first in the office — then you could have one at home, then, the next step, portable. Barely portable! My first laptop was so heavy it would break your lap!

“Moore’s Law predicted a doubling of efficiency every year. Now it feels like there’s an acceleration in both technology and applications. It’s become pervasive; email, texting, things like Facebook and Twitter. I get in my car now and it talks to my phone — through voice recognition it will play my music or make a call for me. Back then it was not something where we’d think “yeah, we’ll get there”. I didn’t know anyone who was, for example, researching office automation. That’s not what you did in university, but IBM and other companies went that route because that’s where the sales were. There was a distinct disconnect [between] academia and research. Now, they are generally aligned, and people in academia are doing research which will have direct benefits.”

When asked about what he loved about being part of the administration, Bob shared this:

“I saw students most of the time, I’d talk to 1000 students a year. You’re seeing all these students; they’re struggling and maybe they’re having problems, but the University actually has lots of things in place for students. Just to project the whole idea that the University actually cares about them and their lives and can maybe help them. To be able to say “You need to go home and you need to deal with that family situation.”

One of The Next 36 by Lauren Long

Switching from Life Sciences to Biomedical Computing was the best decision I ever made. I experienced top notch learning in small-sized classes, was exposed to some of the most interesting research going on in the country, and found my place in a close-knit community.

The Next 36 is Canada’s premier entrepreneurial institute. The goal of the program is to develop Canada’s next generation of high impact entrepreneurs through mentorship, funding, and exposure to top notch faculty members from across North America. The program chooses 36 undergraduates every year from over 1000 applicants across Canada, through a rigorous online and in-person selection process. I chose to apply because I was very passionate about impacting the world through technology, and entrepreneurship is the best way of doing that.

Through my studies in Biomedical Computing, I know that there are a lot of opportunities for computer science to revolutionize healthcare and medical research. I want to place myself at the intersection of scientific innovation and commercialization, in whatever form that may take.
The CTK Hackfest is a bi-annual meeting, where the core developers of The Common Toolkit (CTK) software library get together for a week to implement (hack) critical code sections, discuss the most difficult topics, and have fun together.

Instead of being held at the same location, the hackfest takes place in a different city each time, alternating between North America and Europe. By hosting this event here in Kingston, the Perk Lab and thus Queen's University entered the CTK circulation, hopefully starting a fruitful and long-lasting partnership.

The CTK Hackfest

Hosted by the PERK Lab

David Skillicorn — In the News

Data mining has been much in the news recently because of the Snowden revelations. Data miners collect data about a system and then build models that describe its structure. Sometimes the interests of those collecting and using data are not the same as (some of) those whom the data describes. Data mining in such settings is adversarial. For example, most businesses collect data to decide who their good customers are, so that they can treat them well. If you're a customer, you'd like to make yourself appear to be a good one to get this good treatment – so your interests and those of the businesses are not aligned. Businesses would like to send you ads for things they want to sell, while you would prefer to see ads for things you want to buy so ad placement is also adversarial. Law enforcement and intelligence are other major areas that are inherently adversarial: criminals and terrorists very much don't want to be found.

Professor David Skillicorn studies data mining in such adversarial settings. In a few cases, there are known patterns that signal that something unusual is going on; for example, auditors have a long list of known frauds that they look for in company accounts. More often, though, it's hard to know in advance what to look for because those who are up to something are carefully trying to remain hidden. In two areas, language and social behavior, it is hard for humans to “act naturally” and so these are areas where significant signals are easier to find. Language is generated almost entirely unconsciously, and so it provides a window into the mental state of the person who speaks or writes.

Professor Skillicorn has looked at the ways in which deception, influence, and various kinds of language intensity can be detected in documents such as postings on a web forum, company filings, interrogations, or court testimony. Social networks are also a fertile place to look for unusual behavior because most people don't make a connection for a larger purpose – but criminals and terrorists sometimes do. Professor Skillicorn has looked at the ways in which the social networks of criminal groups form and evolve, and how small unusual groups can be detected in mainstream social networks such as Facebook and LinkedIn. His work is used by governments and law enforcement, and he is often asked to comment in the media on security issues.

The toolkit in question is the result of a cross-Atlantic collaboration of open-source medical imaging software projects, including 3D Slicer and MITK, to name just two. The main principle is to bring many distinguished researchers and software developers of the field together, to minimize parallel efforts by providing a common platform for their software tools.
Creative Computing Exhibition

Another very successful exhibition of computing art and research was held Thursday, April 4 in the BioSciences Atrium. It was a day that highlighted the work of the School’s undergraduate and graduate students with hands-on demos, presentations and posters from a selection of our courses. The event featured the 5th Annual Computer Art Exhibit from this year’s students of COCA 201, projects in Game Design and Game Technology from students in CISC 226 and CISC 877, Human Computer Interaction projects from CISC 325, and poster presentations from our fourth year students based on their major undergraduate research projects.

CKWS TV was on hand to record the events and to hear from PhD student Eric Rapos and Professors Nick Graham and Roel Vertegaal. The Kingston Whig Standard was also on hand to take in the event, and interviewed computing students Jonathan Stanford, Josh Taylor and Dillon Smith, who created a multiplayer game featuring zombies. Nick Graham also provided some insight into the links between computing and creativity.

Creative Computing 2014 takes place on April 3!

CISC 121 — Computing from a Distance

CISC 121 (Introduction to Computing Science 1) was offered as an on-line course for the first time in the Spring term, 2013. Demand exceeded initial expectations and actual enrolment was more than double our initial planned enrolment. The course was offered as a condensed 6 week course with the primary intention of providing an avenue for students to switch their plan to Computing without losing a year of study. Although the course served its primary purpose for many students, the course drew interest from students from many other disciplines.

The course was taught by Wendy Powley who comments that “the students worked very hard and the vast majority went above and beyond the course material. I was amazed by the peer instruction that took place on the forums. Students shared solutions to sample problems, posed and answered questions, discussed the material at great length and even shared detailed study notes”. The course was considered a resounding success and will be offered once again through the Continuing and Distance Studies (CDS) unit at Queen’s in the Spring of 2014.

New Computing and Mathematics Program

The School of Computing and the Department of Mathematics and Statistics are pleased to announce this exciting new program. It is designed to prepare students for graduate studies in the theory of Computing or in an area of Computing requiring significant mathematical expertise, such as communications, optimization, security, or biomedical computing. This program will give students a solid Computing background and a good foundation in the areas of Mathematics relevant to Computing, and it provides a good balance between research-oriented Computing and relevant pure and applied Mathematics.

Not only will students graduating from this program be well-prepared for graduate work in Computing, but the mathematical knowledge gained through this program will provide graduates with a significant advantage in competing for research-oriented positions in high-tech industries.

new compuTinG and maThemaTicS proGram

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The Tyrannosaurus Rex or T. Rex is an iconic symbol of a fierce predator. Coupled with its prehistoric roots, it holds an irresistible "wow factor". The lowly triangle can be perceived as a simple, 3 corner polygon. However, as some students of the Queen's School of Computing Computational Geometry Laboratory have learned, triangles can be fun, in particular when they are applied to T. Rex exhibits.

Research Casting International of Trenton, Ontario is a world leader in museum services. Much of their business is mounting dinosaur exhibits at museums all over the world, including a recent exhibit at the Royal Ontario Museum in Toronto. The crux of their activities is the moulding and casting of museum specimens, a task that requires great technical and artistic ability; however, technology is beginning to play a role in the workflow of RCI. Specimens are scanned using state of the art 3D optical scanning techniques. The resulting digital specimens produced by the scans can be used to plan poses for exhibits, assist in repairing flawed specimens, and printed or carved by 3D printer technology, or a computer controlled router.

The digital side of RCI's business requires special custom software that addresses the specific requirements of this unique use of technology. In comparison to more traditional applications of Computer Aided Design and Manufacturing (CAD/CAM), the objects are larger and hold more detail. The Queen's team contributes by providing the expertise needed to develop specialized software; which brings us to the triangle, the basic building block for the digital specimens.

PhD, MSc, and undergraduates from the School of Computing have been participating in these projects. The work requires a good knowledge of scientific programming techniques and the ability to apply advanced algorithms from the field of computational geometry. The training opportunities are priceless, as are the visits to RCI to walk amongst the giant exhibits in progress, knowing that your work with triangles has contributed to exhibitions of stunning prehistoric artifacts.

Taylor Hall, a second year student in the COMA program, says, “Being able to see these complex mathematical concepts apply to physical objects changes the way you think about the world.” Not to mention Taylor’s newly found appreciation for triangles.

NSERC Summer Student Taylor Hall:
“I have really enjoyed my time working with Dr. Rappaport, and would recommend a summer research position to anyone.”

When asked if Taylor gained experience relevant to his studies, he offered: “Between actually seeing a physical application of mathematical principles that I have only seen used in theory before and a gaining a deeper understanding of algorithm development, I am pretty sure that is a ‘yes’.”
“ I believe that I have helped [with the lab’s research], taking the tedium of testing away from the Graduate and PhD students and writing a few algorithms to make their code more efficient.”
“I have seen the research side of Computer Science [and] am glad that I could have this experience, I don’t know how else I would have had the chance to try research.”

(See Triangles and T-Rex, above)
FIFTH ANNUAL SCHOOL OF COMPUTING AWARDS

On the afternoon of April 3, 2013, a large crowd gathered in Goodwin Hall on the occasion of the 5th Annual Queen's School of Computing Awards ceremony. The awards were created to recognize excellence in various forms of endeavour, and to provide an opportunity to celebrate the contributions of those in the school who distinguished themselves through their exceptional work, and to say thank you to those who made a difference in School life. The awards were presented by Selim Akl.

Congratulations to this year’s winners and many thanks to all those who worked hard to make this day a memorable one: Members of the Awards Committee, nominators, Lynda Moulton for producing the awards, and Mattea Welch, Irene Lafleche, Tom Bradshaw, Ben Hall, and Dave Dove for helping throughout the ceremony.

- The COMPSA Howard Staveley Award for Teaching Excellence: Robin Dawes
- Ph.D. Research Achievement Award: Emad Shihab
- Graduate Student Distinguished Service Award: Layan Nahlawi
- Distinguished Graduate Supervision Award: Mohammad Zulkernine
- Distinguished Service Award: Ben Hall
- Research Award: Tamas Ungi
- Award for Outstanding Contribution to School Life: Mattea Welch
- Award for Excellence in Teaching Assistance: Niv Yahell
- Distinguished Master's Thesis Award: Anton Barua

Queen's Staff Award Winner — Karilee Whiteway

Computing’s own Karilee Whiteway is a winner of the 2012 Queen’s Special Recognition for Staff Award. Karilee distinguished herself through her exemplary dedication to the School’s research mission and her characteristic pursuit of excellence in carrying out her duties.

Her nomination letter stated, in part: “Ms. Whiteway’s service as a research administrator since 2007 has had a tremendous impact on the research output of the School of Computing. She has played a key role in assisting the School of Computing in securing approximately $5-million in research grants annually. This remarkable feat supports the School’s renewal of infrastructure, equipment purchases, graduate student salaries, and supports the university’s budget through overhead allocations. PhD candidates have greatly benefitted from her knowledge of the application process, by her time spent in assisting them with their postdoctoral applications, and the CV workshop that she provides.”

Incredible Job Growth in Computer Science

Computer scientist Ed Lazowska of the University of Washington, Seattle, alerted Science Careers to a very impressive analysis from the Bureau of Labor Statistics (BLS) looking into trends for science-related jobs and predictions for job growth between the present and 2020.

Computer occupations accounted for 62% of job growth in science and engineering.
WISC: Women in the School of Computing

On March 20th, 2013, WISC hosted a “Meet-the-Experts” event. We were fortunate to have two incredibly accomplished women on hand for a Q&A session with our attendees. Dr. Helen Nissenbaum, a Professor of Media, Culture, and Communication & Computer Science, and Director of the Information Law Institute at New York University discussed the role of context in privacy and security in today’s highly connected world.

Dr. Carol Miernicki Steeg is Vice President, Intellectual Property at PARTEQ Innovations, the Technology Transfer Office of Queen’s University. She provided insights into a non-traditional career path for computer scientists; that of evaluating the patentability of inventions, drafting patent applications and prosecuting patent applications. One of our attendees was inspired by Dr. Miernicki Steeg’s talk and has since landed a job as a patent engineer at Osha Liang LLP in Houston.

PaperTab — Human Media Lab

A computer you can fold and put in your pocket? Developed by the Human Media Lab at the School of Computing, “PaperTab” is a flexible paper computer that may be in every home in ten years or so.

The PaperTab tablet looks and feels just like a sheet of paper; however, it is fully interactive with a flexible, high-resolution 10.7” plastic display, and a flexible touchscreen. Instead of using several apps on a single display, users have ten or more “PaperTabs”: one per app in use.

PaperTab’s intuitive interface allows a user, for instance, to send a photo simply by tapping one PaperTab showing a draft email with another PaperTab showing the photo. Sending an email is as easy as bending the top corner of the display.

The Human Media Lab is directed by Professor Roel Vertegaal.

Pictured: Aneesh Tarun

Congratulations to Jim Cordy

Professor Jim Cordy has been appointed an international Grand Professor at the Centre for Advancing Electronics Dresden (cfAED), a German national centre of excellence at the Technical University of Dresden. The Centre, which includes industry partners from AMD, Intel, BASF, SAP, Infineon, Vodafone and more than 30 other companies, is focussed on addressing the current and future challenges of electronic information processing and communications technology, including the entire gamut from basic materials research to complex heterogeneous software systems.

As part of his appointment Professor Cordy will spend one month each year on-site at the Centre to act as senior mentor, postgraduate advisor and collaborator to the young scientists and students there.
Eril Berkok — AMS President

Orientation Week, summer research, internship, university and student government – subjects that don’t directly feature the classroom and yet are no less important to my core university experience. As I reflect on my five years at this school and the final one ahead of me, I cannot help but stress the importance of the broader learning environment.

Most students tend to spend most of their first year soaking in the residence life, experiencing the thrill of finding a house with best buddies, and fighting the good academic fight. But beyond these core activities exists an extraordinary amount of opportunity to further shape your experience and to truly make it your own. Clubs, student governments, Orientation Week, startup companies, research opportunities, athletic teams, charities, work placements, or any other personal endeavours you could think of — these are opportunities to experience and learn from if one takes the initiative.

Let’s break it down: there are 168 hours in a week. Let’s say you spend an average of 20 of those in class. That means you spend 148 hours outside of class. How and where that time is spent will ultimately define a great deal of your university experience. Engaging in meaningful activities outside the classroom will certainly enhance your appeal to prospective employers and graduate schools. Perhaps equally important though, is that the best memories and the best friendships in life so often come from those occasions when we’re committed to trying and experiencing something new – from stepping a little out of our comfort zone.

That’s a realization I think too few people have. It’s very easy to get into the mindset that your grade and degree are all you’re here to pursue, but it goes so far beyond that. You’re here to meet other great minds, to have both good times and bad, to grow into a free thinker, a go getter, a leader. You’re here to become someone who makes an impact on others’ lives, someone who learns to learn, someone who takes initiative to make life better for yourself and others. Join a club, run for elected office, take a wild idea you have and try to make it a reality. This is your time. You are the star of your own show. Don’t be afraid to fail; be afraid of not trying.

My classroom experience gave me necessary life and employment skills, but it’s these out of classroom experiences that ultimately define me as an individual. I’ve had the fortune to have an incredible undergraduate career here, and encourage everyone to take advantage of the life-changing opportunities that Queen’s has to offer.

Cheers to six amazing years,
Eril Berkok
President of the AMS

NSERC Summer Student Leah Robert:

I worked at the EQUIS Lab as a research assistant with Dr T.C. Nicholas Graham. I was mainly working with the project CP Fit n’ Fun, which involved creating an exercise game (known as an exergame) for children and teenagers with cerebral palsy. Working on this project has helped me to realize how useful technology is to people with disabilities.

I enjoyed my time at the lab this summer. I’ve learned much about the teamwork aspect of computer science jobs and have made many new friends in the graduate computing community.

Being at EQUIS Lab for the summer has shown me how much work can be done in the course of four months with the added fun of working with a group of great coworkers. The research I have done this summer has inspired me to continue down the path of software design due to the amazing creations this lab has made and my interest in computer science as a degree being increased. (See Gaming Research below.)

Dr. Nick Graham’s Gaming Research Funded by Canadian Cancer Society

Congratulations to Dr. Nick Graham (Director, EQUIS Collaborative Gaming Technology Laboratory, Queen’s School of Computing), and Dr. Ryan Rhodes (UVictoria) on their successful application to the Canadian Cancer Society for an Innovation Grant. Their research entitled “Exercise Games and Physical Activity: Does Multi-Player Online Play Improve Adherence?” includes another Queen’s researcher, Dr. Amy Latimer-Cheung of Kinesiology, and from UBC, Drs. Mark Beauchamp and Darren Warburton.

The research team will be examining whether an interactive exergame bike, that can be used to play against others over the Internet, results in greater use and fitness compared to an exergame bike without the online play capability. Children are the primary interest of the study, but parents will also take part.

NSERC Summer Student Eric Ingle:

I definitely enjoyed my time here. The EQUIS lab knows how to make work fun. I gained relevant experience. I’m pretty sure my work has helped the school’s research; the software I’ve been working on is ready to be user-tested. That said, a lot of the hard, frustrating work was done by my supervisors. (See Gaming Research, above.)
Manuela Kunz and James Stewart (along with co-authors John Rudan (Surgery) and Vladimir Kratky (Ophthalmology) won a best poster award at the 17th Annual Conference of the International Society of Computer Aided Surgery, held in Heidelberg, Germany, June 26 – 29, 2013, for their paper “Faster intraoperative localization of posterior orbital tumours using a patient-specific instrument guide”.

Dr. Hossam Hassanein (Director, Telecommunications Research Laboratory, Queen’s School of Computing) won two recent Best Paper Awards: 1) “Benchmark Message Authentication Code Functions for Mobile Computing” with Abdulmonem Rashwan (Ph.D. candidate) and Abdelhamid Taha (Adjunct Assistant Professor) IEEE Global Communications Conference, Anaheim, California, December 2012. 2) “Heuristic based Dynamic Spectrum Assignment in Cognitive Radio Network” with Michael Liu (Ph.D. Candidate) and Nidal Nasser (Adjunct Associate Professor)International Conference on Computing, Management and Telecommunications, Ho Chi Minh City, Vietnam, January 2013.

Matthew Stephan, PhD candidate in the Queen’s School of Computing, won the Best Student Paper Award at Modelward 2013, the International Conference on Model-Driven Engineering and Software Development in Barcelona, Spain.

His paper “A Survey of Model Comparison Approaches and Applications” based on his PhD depth work with Jim Cordy was one of only eight papers accepted from a pool of 76 submitted to the conference. (An 11% acceptance rate.) Congrats Matthew!

Four from the Perk Lab

Dr. Gabor Fichtinger (Director, Perk Lab, Queen’s School of Computing) was appointed as a Distinguished Lecturer by the IEEE Engineering in Medicine and Biology Society. The letter of award states: “EMBS Distinguished Lecturer is a major Society award, which recognizes your outstanding contributions in both research and education to the EMBS field of interest.”

Mattea Welch receives NSERC Postgraduate Scholarship M (PGSM). It is a great delight to announce that Mattea Welch received NSERC Postgraduate Scholarship M (PGSM) award. Keep rolling, Mattea!

Manjunath Anand receives BEST of B.E.S.T 2013 award at IRCAD. Manju returned with an award from the the B.E.S.T 2013 summer school at the world-famous IRCAD Surgical Robotics Centre in Strasbourg, France.

PerkLab receives new industry partnership with OCE. The PerkLab received funding from The Ontario Centres of Excellence (OCE) for building a new industry partnership for the research and development of a biopsy guidance system. This industry prototype will incorporate the Lab’s Plus/SlicerIGT open-source platform.

EQUIS Shines

Dr. Nick Graham (Director, EQUIS Collaborative Gaming Technology Laboratory, Queen’s School of Computing) has been awarded an NSERC Engage Grant for his project, Digital Tabletop Interaction for Simulation-Based Training, in collaboration with THALES Canada.

Nick Graham’s CP-Net Research Recognized with Further Funding from OBI. Congratulations to Nick Graham and to CP-Net in their successful application to the Ontario Brain Institute for funding. Over the next five years, Nick will contribute to the Technology Platform through his “Exergame Technology for Youth with CP” research.

We are very proud of Nick’s contribution to improving the lives of children with CP and wish him all the best.

The Human Media Lab unveiled MorePhone at a Paris conference. The revolutionary smartphone curls when a call comes in. The MorePhone was featured on ctv.ca and CKWS-TV as well as in The Kingston Whig Standard and the Queen’s News Centre. The story was also featured in the Daily Mail Online, the Huffington Post (United Kingdom), the Toronto Star, New Electronics and a number of trade publications.

Karolina Zuworska Wins ACM Student Research Competition at MODELS’13. Congratulations to Karolina Zuworska who won the ACM Student Research Competition (SRC) at the ACM/IEEE 16th International Conference on Model Driven Engineering Languages and Systems in Miami, Florida.

Dr. Scott Grant, Queen’s School of Computing Post-Doctoral Researcher, and his co-author Buddy Betts (OUYA, USA), won the Mining Challenge at MSR2013, the 10th Working Conference on Mining Software Repositories with their paper “Encouraging User Behaviour with Achievements: An Empirical Study”.

Undergraduates Mattea Welch, Eric Moult and Gregory Allan were recognized for their outstanding undergraduate research by the Computing Research Association (CRA).

Dr. Mohammad Zulkernine, on his successful collaborative research application to the Canada-Africa Research Exchange Grants program. Dr. Zulkernine will be working with Dr. Ejigu of Addis Ababa University in Ethiopia to develop “Secure and Trustworthy Reservation and Medical Records System (STRMR),” along with collaborating hospitals in both nations.

SAILing to success

Undergraduate Hammad Khalid's work on studying user reviews about mobile apps won the ACM Student Research Competition at the International Conference on Software Engineering (ICSE).

Hammad’s award-winning research was done while he was a summer SWEP/ULSS undergraduate research student at the Queen’s School of Computing SAIL Lab last summer. Hammad continues this work as a Master’s student under the supervision of Dr. Ahmed Hassan.

Shane McIntosh, PhD student with Dr. Ahmed Hassan, was awarded a three-year Vanier Canada Graduate Scholarship (CGS). The Vanier CGS program is administered by Canada’s three research granting agencies (the Canadian Institutes for Health Research, the Natural Sciences and Engineering Research Council of Canada, and the Social Sciences and Humanities Research Council of Canada).

Congratulations to Mohamed Sami Rakha, one of only five Queen’s recipients of the Ontario Trillium Scholarship (OTS) for 2013-2014. This scholarship is awarded over four years to an international student with a first-class average. Mr. Rakha is supervised by Dr. Ahmed Hassan.

Dr. Haroon Malik has been awarded an NSERC 2013 Postdoctoral Fellowship. Haroon, former student of Dr. Ahmed Hassan, was ranked fifth of 68 in his area, from an overall pool of 802 applicants. Congratulations, Haroon!
Many thanks to our Alumni and Friends

We appreciate the following alumni, faculty, staff and friends who directed their Queen’s University gifts to the School of Computing. Listed below are our benefactors over the past ten months. These donations are making a difference! Annual Giving can help us attract outstanding students and continue our outreach program.

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We are very grateful to have supportive alumni and friends who are inspired to make a difference at Queen’s. Your support is instrumental in upholding our long-standing tradition of excellence.
The School of Computing delivers an outstanding university experience, both inside and outside the classroom. We continue to attract exemplary students and world-class faculty and researchers. Thank you for making a difference through your generosity and support.

We are happy to help you explore how you can give back to Queen’s and answer any questions about giving opportunities and priorities.

Please feel free to reach us at the numbers below. We are also pleased, if possible, to set up a personal visit to discuss specific projects or ways you can support the School, either now or in the future. Every gift makes an impact. Thank you for your consideration.

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Carrie Miles: 613.533.6000 Ext. 75501 or carrie.miles@queensu.ca  
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Legacy giving
Faye Ransom: 1.800.267.7837 or faye.ransom@queensu.ca

Any communication about giving and estate planning will be held in the strictest of confidence.

Join us at the following upcoming events:
• November 14, 2013: Research Open House, Goodwin Hall  
• April 3, 2014: Creative Computing, BioSciences Complex  
• May - December 2014: School of Computing 45th Anniversary Celebrations!

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