Seneca
NEWS AT SENECA COLLEGE
NOVEMBER 2008 VOLUME 11 NUMBER 1

TheSenecan

PHOTOS BY RICHARD DOUGLAS

EVERY MOVE YOU MAKE...

...is recorded and digitized when you're doing motion capture, a way to create animated characters for movies and video games. It allows movements made by Neil Davison (left) to be "captured" by a computer and translated to an animated stick figure, just like the one Seneca Animation Arts student Anthony Smith is studying. The system captures Neil's movements by recording strategically placed white disks on his suit and applying them to corresponding points on the computer skeleton. This can be done live, with the computer skeleton matching each move that Neil makes, and cuts down on the lengthy process of having to animate a video game or movie character. After the motions are recorded, Anthony can then apply them to digital characters he's created in class. It's this kind of system that's allowing Hollywood unprecedented creativity in creating new creatures and special effects. Neil and Anthony are working in the Animating Mo-Cap Capacity and Training (AMCat) studio that was launched this fall in partnership with the College's Animation Arts Centre.

For the complete story, please see New motion capture studio opens its doors to students on page 3.

From Mozilla volunteers to software developers

It pays to volunteer for Mozilla, at least it did for a pair of Seneca Software Development students.

Armen Zambrano and Lukas Sebastian Blakk are still months away from graduating, but that hasn't stopped the creators behind the popular web browser Firefox from hiring them.

When they are not in class learning, the Senecans will be doing a wide range of software work on the company's browser including quality testing and writing code.

"Being able to work on real code, with real developers has been invaluable," says Lukas. "I came here to start a new career as soon as school is done, and thanks to the College's partnership with Mozilla I've actually started it while still in school. I feel like I have a head start on the path I've chosen."

Armen Zambrano (right) and Lukas Sebastian Blakk are the latest Software Development students from Seneca to be hired by Mozilla, the creators behind the popular web browser Firefox.

Firefox is a free open source web browser that can be improved and updated online by software developers from around the world.

Included among this group are Armen and Lukas who've spent countless hours of their time volunteering as developers at Seneca's Centre for Open Source Development.

The work they did earned them internships in California and job offers a few months later.

Where most computer science departments or schools only mention free and open source software, Seneca offers a hands-on introduction in partnership with companies in the industry.

"Our students at the School of Computer Studies get to work on actual open source projects," says Chris Tyler, one of the professors involved in the teaching and development of open source at Seneca.

"They get valuable hands-on experience as testers, build engineers and developers."

Since 1998, the School has been teaching open source development and currently offers four courses that involve Mozilla: two in the *Bachelor of Software Development* program and two in the *Computer Programming and Analysis* program.

During a single semester students can be working on as many as 30 Mozilla-related projects.

In the last two years, the company has hired several Seneca graduates, and Chris is confident that list will continue to grow as more students in the School of Computer studies learn about open source.

To learn more about open source at Seneca, visit http://cdot.senecac.on.ca

Liberal Arts program pathway to degrees

Each one has a story. For some, their high school days were marked by a lack of confidence or self-esteem. Many were raised in one parent households and needed to work full-time. Others just weren't ready.

Whatever the case may be, these are all common anecdotes that Program Co-ordinator Peter Meehan and Chair Mark Moss have heard from students that put their university aspirations on hold after high school.

For those who have been out of school but still have the commitment and desire to earn a university degree, Seneca's *Liberal Arts* program is the place to start.

Since its launch 10 years ago, it has helped more than 2,000 students go on to university studies and graduate schools.

"If you are serious about succeeding at university this is the program you want to be in," says Peter.

"We produce students who get into university, and excel."

Seneca's program has been modeled on the American junior college system where students complete two years of liberal arts studies before transferring to university.

The curriculum places a strong emphasis on literacy, critical thinking and numeracy.

As a result, graduates get accepted to universities throughout North America.

The program recently established its first transfer agreement with the University of Toronto and has another one about to be signed with Trent University.

Its long-standing partners include York University, Carleton University and the University of Windsor – just to name a few.

"We had one of our students accepted to Berkley," says Mark.

"From day one when students come to this program we instill in them the importance of education and

PLEASE SEE LIBERAL ARTS ON PAGE 2.

PRESIDENT'S FILE

There are projections that indicate a need for an additional 10,000-15,000 spaces in post-secondary education beginning in 2011.

That's the good news.

The bad news is those needed spaces do not exist.

One of the prime reasons for this increased demand is demographic in nature with baby boomers retiring and projected immigration into Canada increasing.

Again, this is a good news/bad news scenario. It's good because Ontario's economy is facing the need for a change away from its manufacturing past, and this is our chance to create a new workforce for an economy that shows a greater reliance on skills based on current and emerging technologies.

Unfortunately, the bad news is much the same as I've previously stated: without government support, we don't have the means to train this workforce.

There is an answer, though, but we have not yet seen the kind of leadership required to make it a reality.

Even a semi-regular reader of this column knows that I have been an advocate for a new, integrated provincial post-secondary system. It's a model favored by universities in the GTA and the colleges in the 905 area, and it would include the creation of polytechnics with expanded degree granting, applied research and commercialization capabilities. These institutions would focus on applied education that offers a broad range of programs including apprenticeships, certificates (including Ontario College Graduate Certificates), diplomas and degrees (baccalaureate and possibly graduate). Transfer and articulation agreements would allow students to further pursue their educational goals, either locally or abroad. As well, applied research would provide important career-related experience while the institution forms stronger relationships with business and industry.

This solution would provide Ontario with an education system that could meet the changing needs of a skills-based economy, and help to ensure the prosperity of the province.

Without polytechnics, meeting the future educational needs of Ontario's students could be in jeopardy.

This is a long-term investment, requiring new funding models, that may not be to the immediate benefit of a current government — let alone one that is seeing an erosion of its traditional economic strengths at a time of heightened global economic insecurity.

However, I firmly believe that Ontario needs the kind of leadership that can see beyond these current economic conditions and plan for our future prosperity. These may not be easy decisions, but as would be the case with the creation of polytechnics, they would provide us with the tools we need to excel in the years ahead.

Dr. Rick Miner is President of Seneca College. He can be reached by e-mail at president@senecac.on.ca

From the Board

New programs approved

The Board of Governors has given the College the green light to establish the following programs:

Public Administration – Municipal (Ontario College Diploma) is designed to provide students with skills and knowledge of the workings of Ontario municipalities and other levels of government and politics. Graduates will fill the need for entry level municipal employees with an understanding of municipal policy making and processes, financial management and control, and the structure and operating principles of local government.

Project Management – Environmental (Ontario College Graduate Certificate) - is designed to prepare students for team work, project development and management in both the environmental and civil engineering industries. It enables students from related disciplines to gain highly desirable management skills and complete a graduate certificate in two consecutive semesters. Successful completion of this program will assist students in obtaining their Certified Associate in Project Management and Project Management Professional designations.

Customs Professional (Seneca College Certificate) - will prepare students for an exciting career in global trade. Students will acquire in-depth knowledge of Customs laws and regulations from both an industry and Canada Borders Services Agency (CBSA) perspective. Exposure to CBSA legislation, procedures and documentation as well as Customs Brokerage procedures and international logistics will give graduates the skill sets required to secure positions with employers such as customs brokerages, freight forwarders and other businesses and firms that compete globally. This certificate is completed entirely through online study.

LIBERAL ARTS FROM PAGE 1.

knowledge acquisition. It's not something that finishes; rather it's an ongoing process."

The importance of life-long learning is a message that resonated with Howard Steinberg.

Howard came into the *Liberal Arts* program in 2007, marking the first time in four years he found himself back in an educational setting.

The 24-year-old did not apply to a post-secondary institution after high school because he was never a "motivated student."

That all changed when he discovered his passion for teaching.

During a visit to South Africa, he volunteered at a local school and decided education was his calling. Having graduated from high school, Howard could have applied directly to university but felt his best chances of achieving his goal was through Seneca's *Liberal Arts* program.

"I was out of school for a while and knew the odds of me going straight to university and succeeding were not good," he says.

"This program made sense and gave me the tools and confidence to pursue my goals."

Peter says this program is especially geared towards mature students like Howard who wish to pursue a university education.

"Our best students are the ones who have been out of school for a number of years," he says.

"They have worked, they know what it's like outside and are committed to changing their lives."

In Howard's case, he is in his third-year at York University completing a double major in history and anthropology.

As a further example of the program's success, he was recently accepted into York's Bachelor of Education program, bringing him one step closer to becoming a teacher.

"It's never too late to pursue your post-secondary goals," says Howard. "I'm living proof of that."

To learn more about the *Liberal Arts* program, visit http://www.senecac.on.ca/fulltime/LAT.html

Seneca chip designer brings products to life

The next time you admire the eye-popping graphics of your game console, computer or cell phone, think of Yaosan Yeo.

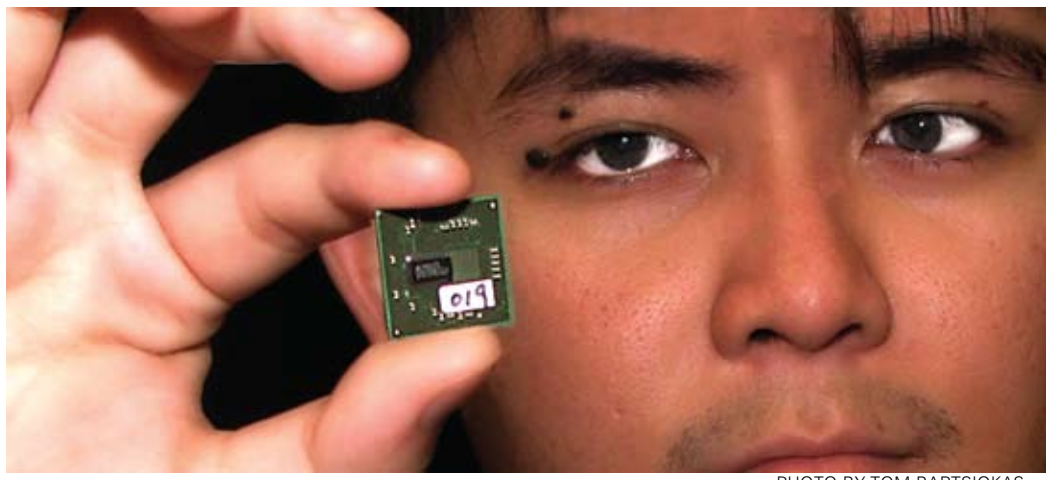

PHOTO BY TOM BARTSIOKAS

Yaosan Yeo is holding up a tiny chip that adds graphics to electronics products. Last year, the Seneca Applied Electronics Design graduate turned a four-month co-op placement into a full-time job with AMD, one of the world's largest graphic chip makers in the world.

This 24-year-old designs the tiny silicon wafers, commonly referred to as chips, that help breathe colourful life into these and many other electronics devices.

It's all part of his job as an analog designer for AMD, one of the largest graphic chip makers in the world.

Companies like AMD are looking for technically skilled employees who can create the next generation of high performance chip and Seneca is one of the few colleges in Canada offering this type of training.

"Chip design remains something of an art," says Mario Boetto, Chair, School of Electronics and Computer Engineering Technology.

"It's a demanding task that makes these designers rare, highly regarded and well paid."

Yaosan learned the intricacies of chip design as a student in Seneca's *Applied Electronics Design* program, a one-year Ontario College Graduate Certificate that trains students in all aspects of electronics design.

As part of their training, students complete a four month co-op placement where they are given the opportunity to gain real-world experience.

Yaosan completed his co-op at AMD, which led to an immediate job offer from the company.

"Yaosan had all the skill sets we look for in our chip designers," says Martin Koolhaas, Analog Design Engineer for AMD.

"He is a very good problem solver, communicator and technically strong."

Since joining AMD, Yaosan has worked on three different chip projects – none of which he can discuss, however, due to the competitive nature of the industry.

His role as an analog designer is to physically draw the look of the graphic chip and all of its parts.

"I love what I'm doing at AMD," says Yaosan.

"With each project I work on I hope to get more experience and work my way up to bigger opportunities in the future."

Seneca's *Applied Electronics Design* program is intended for both new graduates of courses in electronics technology and those with industry experience in engineering or technology.

One of the program's many benefits is its industry connections, which includes a long-standing partnership with AMD.

Martin, and other AMD staff, teach part-time in the program ensuring students are up-to-date on the latest design methods. Needless to say, this relationship has been win/win.

"There is a great need for quality chip designers in the industry," says Martin.

"Working with Seneca gives us the opportunity to recruit students with the skills that we need."

To learn more about the *Applied Electronics Design* program, visit http://www.senecac.on.ca/fulltime/AED.html.

PHOTO BY TOM BARTSIOKAS

Sarah Millard's interest in law led her to Seneca's School of Legal and Public Administration and now she works as a law clerk for a prestigious North American firm.

Young legal eagle soars high working for prestigious firm

You don't have to be a lawyer to have a career in law. Just ask Sarah Millard. The 26-year-old Seneca graduate is a law clerk for Osler, Hoskin & Harcourt LLP – a North American firm specializing in business law.

Law clerks are an integral part of any law office today as they perform vital tasks that help lawyers put their cases together.

"A lot of lawyers are only as good as their law clerks," says Professor Sharyn Borovoy from the School of Legal and Public Administration.

"In fact, they are a lawyer's right hand."

Sarah, who had aspirations of being a lawyer herself, opted against it after researching tuition costs and the time it would take to earn her law licence.

She started looking at college programs that offered careers in law instead, and that's when she came across Seneca's *Law Clerk* program.

Because she already had a university degree, Sarah enrolled in the School's accelerated offering, and within one-year she earned her diploma and received a full-time job offer from Osler.

She's working in the corporate division of the firm as a securities law clerk where she manages a number of different public disclosure filings and some securities registration work.

"I've always been interested in law and this program gave me the opportunity to have a career in the legal profession," says Sarah.

"All the courses I took prepared me to succeed at Osler."

Students studying in Seneca's *Law Clerk* program are trained to assist lawyers in private law offices and in the legal departments of government and industry.

Areas of concentration include real estate, corporate and commercial law and litigation.

Graduates of the program have gone on to careers as law clerks and legal assistants in a wide range of law office environments at firms, governments and corporate legal departments.

The earning potential for experienced clerks can be as high as six figures depending on the area of law they specialize in.

To learn more about the *Law Clerk* program, visit http://www.senecac.on.ca/fulltime/LCKA.html

Making people beautiful all around the world

Virginia Tran has gone from experimenting with makeup on her friends and family to working as a makeup artist for the music and fashion industry.

The 23 year old's journey into the world of lipstick, powder cake, eye shadow and blush started five years ago in Seneca's *Cosmetic Techniques and Management* program.

"I loved to do makeup growing up but lacked the knowledge to turn it into a career," says Virginia. "This program taught me the fundamentals and allowed me to expand on my own as an artist."

Since graduating from Seneca, Virginia has travelled the world working as a freelance makeup artist. These days she spends most of her time in Asia where she can be found behind the scenes at major fashion shows applying face and body makeup on runway models. Before going overseas, Virginia worked in New York and California as an assistant makeup artist for Virgin Records.

Working for a major label gave her the opportunity to apply makeup on some very famous faces such as R&B singer Ashante, Kelly Rollands of Destiny's Child and reggae singer Sean Paul.

"I've been very fortunate to work with the people I have," says Virginia. "This business is all about word of mouth and the calibre of your work."

Rhonda Shupe, Co-ordinator of the *Cosmetic Techniques and Management* program, says the beauty, fashion and entertainment industry rely heavily on the skills of professional makeup artists.

The careers for makeup artists are varied and can include work for fashion designers, modeling agencies, magazines, advertisers, movie production companies, cosmetic companies, image consultants and individuals such as brides-to-be and post-surgical patients.

"But this is predominantly a freelance business and it's up to the makeup artist to build their own list of clients," says Rhonda.

Making people look beautiful is Virginia Tran's job. Since graduating from Seneca's Cosmetic Techniques and Management program in 2003, the 23-year-old has traveled the world, working as freelance makeup artist.

Virginia agrees. She recommends anyone interested in pursuing a career as a makeup artist should start building their portfolio early. Whether that's by volunteering their services for a wedding or working part-time at the cosmetics counter of a retail store, Virginia says clients will want to see a makeup artist's work before hiring them. "Makeup is all about making people feel good about themselves," says Virginia. "If you can demonstrate that, you'll find yourself in high demand." To learn more about the *Cosmetic Techniques and Management*, visit http://www.senecac.on.ca/fulltime/CTM.html

New motion capture studio opens its doors to students

On the big screen, it's hard to tell what's real and what's not these days.

In the recent movie *Iron Man,* scenes of Robert Downey Jr. fighting villains in his armour suit look like the real thing.

In fact, the actor's metal costume was created digitally and animated through motion capture technology.

It's the latest advancement in a filmmaker's quest to trick the eye, and it can be used in an entire movie, such as *The Polar Express* or *Beowulf*, or to bring a single character to life such as Gollum in *Lord of the Rings*.

"Motion capture is billed by some as the future of digital animation," says Mark Jones, Associate Chair, School of Communication Arts. "It was first introduced in the gaming industry and has since expanded to film and television."

Motion capture, also referred to as motion tracking or performance capture, is a way of recording an actor's movements and applying those movements to a digital character.

During a typical motion capture session a performer will wear a body suit with white markers on it while specialized cameras and software record every position and angle. Digital artists then use the data to create life-like animation.

This technique was used throughout the filming of *Iron Man*, allowing animators to create a digital suit for the character.

Seneca students will be learning the ins and outs of this revolutionary technology at the Animating Mo-Cap Capacity and Training (AMCat) studio, a new Toronto-based motion capture facility.

Launched this fall, in partnership with the College's Animation Arts Centre, AMCat will give Seneca students the opportunity to work on actual film and television projects.

"Some animation schools offer training in motion capture technology, but not on this scale," says Mark.

"This is the only fully independent motion capture production facility in Ontario and our students will have complete access to it."

Seneca's partner in AMCat is Fast Motion Media Group, a Toronto-based company that specializes in motion capture production.

Over the years, its personnel have worked on a number of different film and television projects including the *Chronicles of Riddick*, *Bulletproof Monk* and *Relic Hunter*.

To learn more about AMCat, visit http://mocap.senecac.on.ca

NEWS DIGEST

The Seneca Way is the only way to get to Markham Campus

The roadway entering Seneca's Markham Campus has been renamed 'The Seneca Way.' A new road sign was unveiled in the atrium of the Markham Campus on Oct. 16 by Julian Irani, Student Ambassador; Cindy Hazell, Senior Vice-President; Frank Scarpitti, Markham Mayor and Anastasia Tchernykh, Student Ambassador.

From left to right: Tina DiSimone, Dean, Applied Arts and Health Sciences; Cindy Hazell, Seneca Senior Vice-President; Dr. Helena Jaczek, MPP for Oak Ridges-Markham; and Deb Matthews, Minister of Children and Youth Services.

Seneca launches Bachelor of Child Development

Dr. Helena Jaczek, MPP for Oak Ridges-Markham and Deb Matthews, Minister of Children and Youth Services helped launch the first *Bachelor of Child Development* program in Ontario at Seneca's King Campus on Oct. 23.

"This new program will build on our knowledge of early childhood development and help us better provide the right supports to Ontario's children and families," said Minister Matthews. "It will help further the already high standards for early learning in this province and strengthen the important role early childhood education plays in the lives of Ontario's children."

Students in the new degree program will receive a strong theoretical foundation and professional application in the field including three field placements and one internship. They will enter the field of child development with excellent communication skills, comprehensive knowledge of children and their families, understanding of human behaviour, an analytical intellect, and a compassionate and caring practice.

New agreement expands Seneca animation education in India

Seneca and Frameboxx Animation and Visual Effects in Mumbai, India announced an agreement to jointly offer Graduate Certificate Programs in Animation, Visual Effects and Gaming in India.

Scheduled to begin in January 2009, this new initiative will offer spaces for a maximum of 25 students. The first semester will be completed in India and will cover a wide range of courses ranging from pre-production essentials including life drawing and storyboarding to animation principles and workflows. Eligible students will then have the opportunity to complete the second semester at Seneca where they will learn advanced topics such as project and character development.

Seneca selected as one of GTA's top employers

Seneca has been named one of Greater Toronto's top 75 employers in a special supplement of the *Toronto Star*, released Oct. 18.

Seven key areas were considered when selecting this year's list. They include: physical workplace, work atmosphere, health, financial and family benefits, vacation and time off, employee communications, performance management and training skills and development. "This acknowledgement recognizes the dedication and commitment of our employees who make it possible for Seneca to offer high quality education and services that support our students," says Susie Vallance, Seneca Vice-President of Human Resources.

Students work featured in national campaign

Campaign material developed by Seneca students is part of a national child abuse prevention campaign entitled, "It's Natural to Protect."

As part of their *Design for Social Change* class, Seneca students created posters aimed at raising awareness of child abuse and neglect. The campaign materials were created in partnership with Toronto Police Service, BOOST Child Abuse Prevention & Intervention, the Children's Aid Society of Toronto, and The Hospital for Sick Children's Suspected Child Abuse & Neglect Clinic. "These young designers tackled an important topic that deals with difficult issues," says Professor Paul Shecter. "They not only created great designs, they created designs that do good."

President Miner meets with area MPs at Markham Campus

Seneca President Rick Miner met with Federal MPs Peter Kent (left) and John McCallum (right) at Markham Campus to discuss Seneca's role in meeting the future needs of Ontario's students.

Peter Kent, a former broadcast journalist, is the newly elected MP for Thornhill. For 40 years, he worked as a writer, reporter, producer, anchor and senior executive in Canada, the United States and around the world.

John McCallum is the MP for Markham-Unionville. He was first elected to the House of Commons in 2000 and serves as the Liberal finance critic for the official opposition. During his time in politics, he has held cabinet portfolios under both the Jean Chrétien and Paul Martin governments.

Seneca

For questions about circulation of The Senecan, call 416.491.5050 ext. 7010. Submissions or questions about articles in The Senecan should be sent to:

Tom Bartsiokas
Seneca College, Marketing and Communications

1750 Finch Ave East, Toronto, ON M2J 2X5
416.491.5050 ext. 7019
Tom.Bartsiokas@senecac.on.ca

The Senecan is published by the Marketing and Communications department of Seneca College of Applied Arts and Technology.