

The Internship Experience

Internships are a wonderful way for students to explore their academic interests outside of the university realm. For those that find opportunities within industries related to their fields of study, they are able to turn their theoretical knowledge learned in the classroom, into practical experience in the work force.

The Internship Office is here to assist students in finding internship placements that will compliment their education. For more information, please come by the office, MS2-082 or send an email (lindsay.oconnell@mcgill.ca).



[Alexandra Sumner](#)

McGill University/University of Notre Dame Environmental
Research Center, Land O'Lakes, WI
U2 Environmental Biology

Entering my fourth and final year of my undergraduate degree, I feel much more prepared to graduate and begin my next course of study now that I have had a research position. Majoring in Environmental Biology, and specializing in Wildlife Biology I have had many wonderful experiences in the field, although all of them have been quite

guided. A new responsibility was attained when I was hired to work as a field assistant for a McGill professor, Dr. Chris Solomon, on a research project taking place on the Michigan-Wisconsin border. Dr. Solomon and two researchers, Dr. Stuart Jones from the University of Notre Dame and Dr. Brian Weidel from USGS, are working together to determine the effects of increased terrestrial organic carbon on aquatic ecosystems.

I learned more this summer than in any of my courses. Not only about how to take samples of insects and how to identify them, but about research in general. In the lab I learned how to listen to specific instructions, how to analyze data, and how to think independently. I was able to observe scientist-scientist interactions. I saw the effort that goes into publishing a paper and mistakes being made. I got to give my input on how to better the experiment and how to remedy mistakes. I got to proof read a paper of a different study prior to submission to a scientific journal.

"I would recommend an internship for any student, in any field. It allows you to find out what you enjoy, what you dislike, where you want to end up and where you don't".

Thanks to the many opportunities to try new equipment, practice providing my own thoughts, and act under my own instruction, I feel that I am better equipped to successfully complete my undergraduate degree and perhaps start a Master's degree. However, I feel that of all of the things I learned this summer, the most valuable is that I learned the capacity of what I have to offer, and it is much more than I had anticipated!

I found that research is difficult, and many things can go wrong. Nonetheless, I now know that it is something that I could see myself doing. This summer internship has given me wonderful experiences and many newly acquired skills. These skills I can apply to future research jobs and hopefully to my own Master's degree research.



Antoine Pouliot

Développement d'Équipement de Fourrage Inc.

Boisbriand, Québec

U1 Bioresource Engineering

From a very young age, I had aspirations of becoming an engineer; I wanted to build machines that would help farmers do more in less time. As a farm kid, I know how important it is to have tough and productive equipment in order to outrun climatic conditions.

Success, as an engineer in this day and age, requires technical competence and a combination of management, leadership, communication and business skills. I believe that the best way to obtain those skills is through constructive internships such as the one D.F.E. offered me. D.F.E. (better known as Dion Machineries) is an agricultural machinery development company based in Boisbriand, QC. It has been producing high quality forage equipment since 1920.

My job mostly consisted of assembling forage wagons and corn heads for forage harvesters. These machines are sold to farmers around the world. I also had the opportunity to help the engineer bring modifications to the drawings as we were encountering inadequacies; I'd say this was my favorite part. I acquired a valuable knowledge in most fabrication processes such as computer-assisted drawing, welding, assembling and servicing of machines. I learnt when to use and how to differentiate most fastening devices (bolts, welded nuts, chains, snaps, pins, screws, etc.) and bearing units (flanged, plummer block, take-up, etc.).

"I would recommend participating in an internship because it is the most effective way to know if one's studying in the right branch".

The greatest challenge that I faced during this internship was when I started assembling machines using exploded view drawings. These drawings were so confusing at first because of the mammoth amounts of parts and reference numbers on each of them. In the end I'd say I overcame this difficulty quite easily.

This internship helped shape my future career by confirming me in my choice to study agricultural engineering and by giving me references and professional contacts for future career opportunities.



Bernice Ting

Zinman Marché de Volailles

Montréal, Québec

U1 Food Science & Nutritional Science

Over this past summer, I worked at Zinman's Chicken Market at Montréal's Jean Talon Market, located on Saint-Dominique. They are a well-established butcher shop, originally a slaughterhouse for chickens only.

During my internship I was given the role of "floater", which means that I was to help around the store where ever I could. Although I did not have a defined position, my job allowed me to gain instead a variety of experiences. I learned to do the cash, answer the phone, take orders and make bills. As for meat, they taught me how to take apart a chicken using a boning knife and a cleaver, prepare sausages, weigh the orders and complete the orders. Finally, I experienced what goes on in running a butcher shop.

What I appreciated the most about my internship was being able to learn something new every day, whether it was about butchering, being employed or being a fellow employee. One of the things that held great importance for me this summer was food safety. In class, whether for Food Science or Nutrition, a lot of emphasis is put on the subject and I was happy to see that Zinman did take care in keeping the shop sanitary. The entire cutting area in the back and all the soiled equipment from the front was hosed down with bleach and piping hot water at the end of each day. The floors, doors and bathroom were also scrubbed clean with bleach on a regular basis.

"There exists no more realistic or certain way of making decisions about the future than to actually live it".

I think that participating in an internship is a unique and irreplaceable way of helping one shape his or her career. It's a great way of meeting people in the industry who can share their experiences with you and advise you. There is so much that you can take away from an internship that you can't in a classroom setting. Hearing about things is never quite as accurate as actually experiencing it.



Camille Le Gall-Payne

Centre d'Étude de la Forêt

Sutton, Québec

U2 Environmental Biology

My name is Camille Le Gall-Payne and I am a student in Environmental Biology with Wildlife as a major. I very much enjoy being outdoors and I know that fieldwork is essential in environmental biology. I applied to work as an intern for *Le Centre d'Étude de la Forêt (CEF)* a *chaire* of research for

L'Université du Québec à Montréal (UQAM). The *CEF's* goal is to study everything related with forests (ecosystem functioning, exploitation of the forest as economical resources, tree functioning etc). In the interview I had to choose between several projects. The one I wanted the most was a project located in *Les Cantons De L'Est* more precisely *Mont Echo* which is near Sutton.

What attracted me the most in that job was the fact that I would actually work every day in the forest. The job description was to study the impact of the elevation gradient on tree species with a long term objective to look at the impact of climate change. Our task was to characterize and map the trees present on our plot which was 200m by 1000m long. During this summer, I realized that I accumulated a lot of knowledge in university. It was at first very useful in the tree identification. The Flowering Plant Diversity, which is known to be hard for every student ended up to be very useful because not every student retains and knows their plants, I was grateful to have learned them. Also, some of the knowledge on forests in general and the importance of being very thorough in field work learned in school were useful.

"Before doing my internship I thought that I was more interested in animals and ecosystems in general but I learned that I was also interested in the forest and plants as well".

I really feel that this internship will be useful in the future in many ways. The most obvious one is from all the techniques I learned. There is also the fact that I really extended my knowledge on how research works on the field but also how you really need good communication and relations with people for your project to work. For all that I learned, the people I met and just for being truly outdoors all summer long, physically active, I definitely recommend my internship for every student in environmental biology.



Daniel Le

Covidien

Pointe-Claire, Québec

U1 Life Sciences

Since a very young age, I've been interested in science, whether it was chemistry, biology or even physics. But as I grew up, I learned more about biology and microbiology and I decided that this would be what I would want to study in.

This summer my internship was at a pharmaceutical company called Covidien. This company is a well known international corporation that develops medical products. In this plant, Covidien produces saline solutions and contrast agents. My position was in the Microbiology lab, working as a lab technician. I chose this job post because it related to my field of study and it would help me understand what being a microbiologist meant.

At this internship I acquired a great deal of experience and a sense of how things work in a production microbiology lab. I got to dress up in sterile costumes to take samples of the sterility rooms and I also learned how to make agar gels from powder form. My supervisors taught me a lot about how a production lab worked.

"I recommend participating in an internship to other students because it is a great way to experience firsthand what it feels like to work in the field".

My academic background helped me in this internship because I had previously learned many basic techniques in courses such as "Introduction to Microbiology" and "Genetics". Being a lab technician didn't require too much theory, it was all hands on. This allowed me to practice all of the techniques I learned in school and develop new skills and new ways to do experiments.

After finishing this internship, I realized that although I enjoyed this job, I do not want to work as a lab technician as a career. This internship allowed me to realize that I was more interested in the research side of microbiology and that I'm probably better off working in a Research and Development lab. I'm very glad that I took this opportunity to expand my experience and got to see for myself what working in a lab was like.



[David Barrington Marquis](#)

*Clinique Vétérinaire Île des Soeurs Inc. Verdun, Québec
& [Croque-Science Inc.](#) Boucherville, Québec*

U1 Environmental Biology

My name is David Barrington Marquis and I'm a student in the Faculty of Agricultural and Environmental Sciences on the Macdonald Campus of McGill University. I'm currently majoring in Environmental Biology, specializing in Wildlife Biology, along with two minors, one in Field Studies and the other in Environment.

This summer was split between two work placements: first I spent some time working as a general assistant at the Nun's Island Veterinarian Clinic, located on Nun's Island. Operating as a regular, privately owned medical practice, the clinic's mission is to offer animals the best medical care available, while providing their owners with a friendly and convivial service. My second work placement was with Croque-Science day camp. This nature-oriented day camp aims to spark children's awareness of their natural environment at a very young age: the camp is open to 5-12 year-olds.

As an intern at the Nun's Island vet clinic, my main role was to care for the animals that weren't under immediate medical supervision, such as all the pensioners. I would be in charge of walking the dogs, feeding the cats and dogs, keep the cages clean, ensure that any medication was administered, and generally keep an eye on them. Additionally, I was often manning the front desk but on occasion, when needed, I would be called to assist the veterinarian with whatever she may need help with, from injections to x-rays to surgery to just general physical exams.

"I would recommend an internship to anyone because nothing beats practical experience; it tells you the true ups and downs of any job".

At the day camp, my duties were to take charge of one group of between 6-12 children for one week at a time, make sure they stay safe and happy, make sure they learn something about nature and the environment, and, above all, ensure they have fun in doing so! We would often go for hikes around the nature reserve, overturning logs and rocks for bugs, and looking in the distance or in the treetops for other types of mammals.



Erin Mayo-Goldberg

Clinique Vétérinaire du Vieux Village

Sherbrooke, Québec

U1 Life Sciences

I completed my internship at the Clinique Vétérinaire du Vieux Village and the Clinique de Stérilisation des Petits Animaux de l'Estrie, two veterinary clinics in Sherbrooke Québec.

During my internship, my main duties at the two clinics were to assist the veterinarians and technicians with the contention of animals during treatments, appointments, x-rays; help prepare the animals for surgery; answer the telephone and answer basic questions on the available services, animal health, behavioral problems, etc. I also helped to educate clients about vaccinations, anti-parasitic treatments (de-worming), microchips, nutrition, behavioral issues, spaying and neutering, etc. I gave basic treatments to the animals in the hospital and made sure they were clean and comfortable.

Over the course of my internship, there were two moments that really stood out. I was able to assist/observe two very interesting surgeries: the removal of bladder stones from a dog and the enucleation (removal of an eye) of a cat. Since I was able to assist the veterinarian during the examination of many cases, I was able to establish an association between the material I have

“...this experience helped shape my future career because it further justified my desire to pursue veterinary medicine”.

learned in my classes and what I saw in front of me. Many of my classes gave me a good understanding of what affects animals at a microscopic level. During my internship I was able to make the links between what I learned in class and what was going on at a macroscopic level with the patients in terms of symptoms especially.

There are many reasons why students should participate in internships. One good reason is to have the opportunity to work in the field you are interested in. The student will get hands-on experience that will not only enable them to be able to find other work opportunities in their field, but also to gain practical experience. This experience will allow the student to determine whether or not pursuing a career in whatever domain is something they truly want to do.



Geneviève Blanchet

Le Nichoir

Hudson, Québec

U2 Life Sciences

For as long as I can remember I have always been fascinated by animals. This interest has led me to major in Life Sciences with the specialization in Animal Biology. With two years completed, I can confirm that I am in a program that suits my interests.

Le Nichoir, a non-profit rehabilitation center for wild birds, gave me the opportunity to work with wild birds during the summer. I chose to work at Le Nichoir because I haven't had experience with wild animals and especially with birds. I thought it would be a great opportunity to implement my knowledge acquired at school in real life situations. Moreover, I knew I would be in contact with wild injured animals and I thought this could help me confirm my interest in veterinary medicine.

My tasks at Le Nichoir were variable and included, filling-up admission sheets for every new bird coming into the center. In order to fill the admission sheet, I had to look for fractures, wounds, dehydration, parasites and apparent infection. Once the bird was admitted I had to set up a treatment if needed. Another essential responsibility I had as an intern was to take care of feedings. I think the task I enjoyed the most was probably the releases because I could see in concrete manner the results of our work. Releases were the proof that we are able to raise orphans and heal older birds without altering their wild habit.

"My internship at Le Nichoir has helped me to form a clear image of my future career which is to become a veterinarian. I also realized that the rehabilitation world is full of opportunities for which I have a growing interest".

A few months ago, I never thought I would be able to learn that much from my internship. I am still amazed by how much I have grown not only as a person but also as a professional. I strongly believe that all the students should seek to do an internship during their undergraduate studies. The reasons are numerous. It's an easy and efficient way to get hands-on experience in your field of study and gives you an idea of the job opportunities that are available. Internships are an opportunity to develop new skills and to acquire new knowledge in field of your study. As well, you can make new connections by meeting highly-trained professionals in the field of interest for future jobs.



Isabelle Côté-Laurin

Progestion MEC

Laval, Québec

U2 Bioresource Engineering

This summer I was hired by a firm situated in Laval called Progestion MEC. They specialize in legal expertise in scientific domains such as civil engineering, microbiology, environment, chemistry, metallurgy, etc. Essentially, people call them when they have a problem and they want to

know the cause and/or the solution. MEC experts can determine the cause of a broken oil reservoir, mould growth, and they can also organize and supervise the decontamination works.

Working with Progestion MEC was an interesting proposition because it sounded very different and varied, even though I didn't know what to expect.

Most of the summer can be summarized in two words: supervising and sampling.

Supervising decontamination works, taking pictures, taking notes to remember what happened, how did we do it, etc. The sampling part in a given project was first to determine how it came to be contaminated, to what extent, what was present naturally on the site and what was abnormal. The second sampling was to confirm that the site was not in the same condition than prior to the event that lead the client to call us. I would also write reports, contact people to organize the works, talk about the financial aspect of the project, etc.

"I think that working experiences are the key to successful studies".

There were many projects and highlights to my summer; however the one that stands out is what I learned about myself; what I like and what I dislike in a job. Nothing helps you more applying the concepts you saw in class; it can refresh your memory about stuff you would've forgotten otherwise; it helps you understanding what kind of job you want and develops your knowledge and qualities. However, the most important is that it helps you know yourself more, because you have to rethink about your week, your summer; you see your achievements, you spot your qualities and weaknesses.



Jaaved Singh

Agriculture and Agri-Food Canada

Brandon, Manitoba

U1 Environmental Biology

I am majoring in Environmental Biology with a specialization in Wildlife Biology. The reason for choosing this major is to work in and for the environment. I also have a deep passion for studying animals and that is why I choose my specialization. My job at Agriculture and Agri-Food Canada (AAFC) definitely had me working outside and witnessing how agriculture and the

environment affect one another. Surprisingly though, I also managed to observe many animals, mostly insects, while employed at the Brandon Research Centre.

The Research Centre is part of the federal government located in Brandon, Manitoba. Its goal is to provide Canadian farmers with the best tools and knowledge so they can grow crops best suited for Western Manitoba and Western Canada. They evaluate and develop various farm management techniques so farmers know how to accomplish their goals while making sure the land is not drained of their nutrients and that the farmers don't exhaust their land. They also create and evaluate new variants of crops for traits desirable to farmers such as yield and disease resistance.

I had many tasks that varied in skills and may not be the first thing you think of when you do research. I was given tasks that included sorting seeds into packages to be mailed to other research stations and putting seeds into seed trays. I also had to setup irrigation for the nurseries and then maintain the nurseries via weeding and rouging.

The weeding allowed the barley to grow properly so we can limit the factors affecting barley growth. We want to make sure if damage is being done to the barley, it is by the pathogens we are infecting them with.

"...you get work experience and most importantly, get to experience the real world and develop a much better understanding of what you want to do in life".

I have changed myself after working at the Research Centre. I learned to be more observant over my internship. My work required constant vigilance as it is very easy to make a mistake when sorting seeds which can jeopardize the entire experiment. This internship showed how government research is done. I got to see the scientific method at work and learned how much work and variables are involved. I now have a greater understanding of research work and what to expect. I am glad I got to participate in this internship and got to experience all that my work offered me.



Laura Braun

Berliner Wasserbetriebe (BWB)

Berlin, Germany

U2 Bioresource Engineering

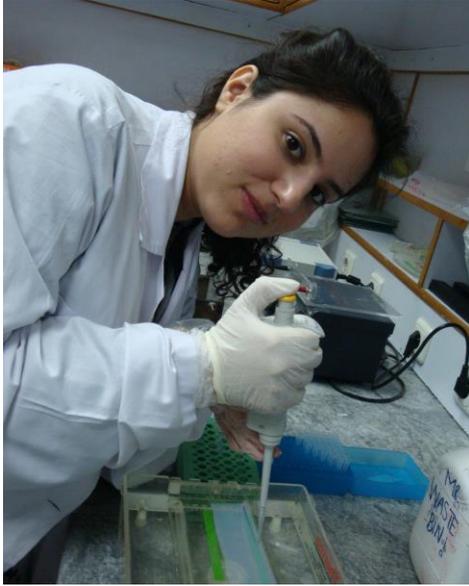
I am a Bioresource Engineering student at McGill University and this program consists of 5 streams, one of which is water and soil engineering, which have always interested me the most. It is only in the 4th and 5th year that students are enabled to study the topic of their choice in greater detail. In preparation for the next semesters, I decided to do

an internship in the water field. My previous internships have been in very small companies in which I only got a sense for a small sector of environmental engineering. That is why I wanted to go to a larger company that has diverse research projects. The Berliner Wasserbetriebe supplies 3.7 million people in the Berlin and Brandenburg area with drinking water. The private-public company is also in charge of treatment and disposal of wastewater. I was put in the department of research and development which I thought was fairly suitable for my background.

I am extremely satisfied with my internship. I feel very fortunate to have had the opportunity to get hands-on experience at three different water treatment plants. All my colleagues were very open to helping me, and really took their time doing so. At the treatment plant Münchehofe, one of the projects was the improvement of treated wastewater quality with the means of an additional filter system. Besides working at Münchehofe, I also carried out some experiments at the treatment plant in Schönerlinde. At last, I was also able to get to know the treatment plant Wassmansdorf where I had to do the same profile measurements as I had been doing in Schönerlinde.

“Before this internship, I was convinced that I was going to work with water management, but now I know that there are so many more options out there”.

Researching is always a very exciting task, and I will definitely keep myself up to date with the projects that I took part in. Looking back three months ago, I feel that I know much more, not only about water treatment, but also what it’s like to work at a company like the Berliner Wasserbetriebe and possibly even write a Master thesis here. I will definitely try to do another internship next summer, as one simply obtains knowledge and experience that one can’t gain at university.



Mariam Saad
Shifa International Hospitals
Islamabad, Pakistan
U1 Life Sciences

The science of living things fascinates me. For as long as I can remember biology has been my key interest. Consequently I chose Life Sciences as my major. By the end of my freshman year, I knew I was interested in biochemical pathways and molecular genetics so I opted to specialize in biotechnology and microbiology. This summer I worked as an intern at the PCR labs at Shifa International Hospitals in Islamabad. The hospital is one of the leading hospitals in Pakistan. The department I worked in was a joint affiliation between

Pakistan's very few bioscience research universities and the hospital. In addition to conducting research on genetic diseases, the lab served as a molecular diagnostics lab.

Over the summer I had to complete case-control association studies from single nucleotide polymorphisms that occurred in genes associated with psoriasis and diabetic retinopathy respectively. I worked primarily on diabetic retinopathy among the Pakistani population. I ran ARMS-PCR and RFLP analysis in addition to being involved in day-to-day work in the lab where I had to learn DNA isolation, polymerase chain reaction (PCR) and gel electrophoresis.

“An internship is a necessary step towards your future career. There is a distinct difference between simply knowing how to do something and actually doing it”.

In the course of my work, I needed blood samples from three kinds of patients: those who were healthy, those that had diabetes but no retinopathy, and those who had diabetic retinopathy. In order to obtain those blood samples I was taught how to draw blood from actual patients in the hospital. The experience was intimidating but oddly gave me a great feeling of accomplishment.

In conclusion, an internship gives you a “test-run” of your field of interest. The results of said test-run will tell you whether to pursue this field as a future career or not. Finally, an internship gives you a chance to network and obtain contacts who are already working jobs or positions you may be interested in.

Internships give you real-world perspectives and that comes in handy because eventually we'll all have to go out into the real world.



Marie Verrot

Les Ateliers de la Terre

Paris, France

U2 Environmental Biology

I am studying on the Macdonald Campus in Environmental Biology with a specialization in Applied Ecosystems, which I am certainly passionate about. However, even if I love sciences because it answers a lot of my questions, I have always known I would not

become a researcher or stay in the scientific field. I love reading, writing and creating, and I either want to work in the field of sustainable development or scientific journalism for which having a scientific background will help me better understand some of the issues. All of these reasons have led me to do my internship in The Planetworkshops, a French think tank based on sustainable development situated in Paris, two steps from “La Cathédrale Notre Dame”. Their mission is to inspire world leaders with strategic and expert insights, implement initiatives with a positive social and environmental impact, engage industry leaders in the sharing of good practices, and enhance partnerships between the public and private sector.

One of The Planetworkshops major achievements is the organization of an annual Global Conference aiming at bringing together leaders from various horizons to challenge conventional thinking. During my internship I had mainly worked on developing this conference. Basically what I had to do was identify stakeholders and guest speakers that could be relevant to the Global Conference themes and invite them to participate in the event.

“I would definitely recommend participating in an internship because one can apply knowledge acquired at the university, discover new responsibilities, see how companies work and precise their professional goals”.

After 14 weeks spent being an intern, I learned a lot about the organization behind events, the functioning of small businesses, roles and relationships in a company, actors of sustainable development, journalism and communication. I have also been able to exchange on many social and environmental issues I have been studying for the past two years and to discover a lot of enriching points of view.



Martin Montpetit St-Jacques
Solutions Alternatives Environnement
Dorval, Québec
U3 Agricultural Sciences

Concerning my internship, I chose a company named *Solutions alternatives environnement*. Their office is based in Île Perrot, but my place of work was the city of Dorval. In fact, this company has contracts with different cities to hold the Green Line service. The Green Line of each city is a bit

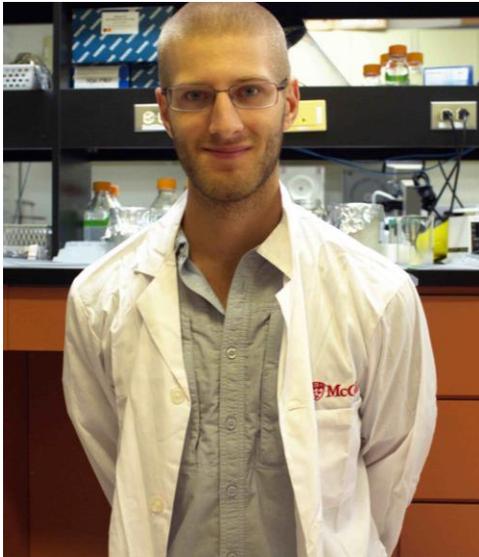
different or personalized to the main concerns and needs of a specific city. Concerning Dorval, the main goals are to promote a pesticide free environment both for the citizens and companies and to help people in their transition toward a pesticide free lawn (advice by phone and visits at home). I was also responsible for evaluating the requests of permits to cut down trees. This means that I had to evaluate each tree individually and discuss with the citizen the reasons for their request.

My main duties or tasks during the summer were to inspect trees and to respond to the multitude of requests to cut down trees. Another part of my job was to ensure the protection of trees during construction works. Finally, I was also responsible for the green line services which consist in helping people with their environmental problems. These included lawns, pesticides, bugs, gardens and of course trees. This year, the job was mostly oriented toward the trees than the green line.

“...this internship is a wonderful one since you learn and apply what you learned during school and the different formations”.

Throughout this internship, I learned many skills and knowledge. Of course, fieldworks provide an incredible source of new information, but I also learned a lot during the monthly formations where some experts of different topics were present. These formations were interesting since they are experts who really work on these specific topics each day and I was able to ask them all my questions and get answers.

I really recommend an internship similar to this one to anyone interested in working outside with trees. In fact, the main goal was to preserve trees and teach citizens that their tree is still secure even if there's a small hole or dead branch in it. Moreover, once you successfully convinced a citizen to do so, it is in a certain way rewarding because you just saved a tree. One tree might not seem like a lot, but at the end of the summer it's the equivalent of hundreds of trees.



[Maxym Malynowsky](#)

Research Project on the Macdonald Campus

Ste-Anne-de-Bellevue, Québec

U1 International Agriculture & Food Systems

The work I've done this summer is tightly related to the plant science courses I've been taking, mainly plant ecophysiology and genetics. As part of the ecophysiology course, I had done a paper on the bioremediation of explosives using genetically modified poplar trees. It greatly interested me, and I wanted in on a McGill lab that would give me the experience to see what it's like to do this kind of research. There was no room in the biotechnology lab,

but the bioinformatics professor, Martina Stromvik, had just come back from sabbatical so there was much to be done in hers. It seemed close enough to the field I was interested in, and besides, she needed someone with database knowledge to fix one of her programs she wanted to port.

In all, server administration and reading papers consisted of a good month or so of work. It felt weird to get paid to read things and look over computer code, but I soon got used to it as a norm. The fact that I wasn't producing anything during that time was weird, but in new technology, substantial investments have to be made before results appear.

The second half of my work was more hands on, which I was glad for. It felt like I was actually doing something for a change; I soon revised my opinion of that. Reading the works of others feels like you're discovering new things at lightning speed, but putting that to reality is enormously slow. One sentence of a paper can take a month to get right. For example, it had taken me a month to realize that my primer design was wrong, which is only a sentence in the methods section. If I had been doing a Masters and published, the entire paper would have no problem taking two or more years. It was this willingness to pursue despite repeated failures that proved to be the biggest challenge in my summer.

Now that it's all over, I've had a new look at what it means to do research. I've decided I like working with computers, and in their case long work generally results in appreciable results. I've improved also in database and server administration.



Michelle Reeves

Le Nichoir

Hudson, Québec

U1 Environmental Biology

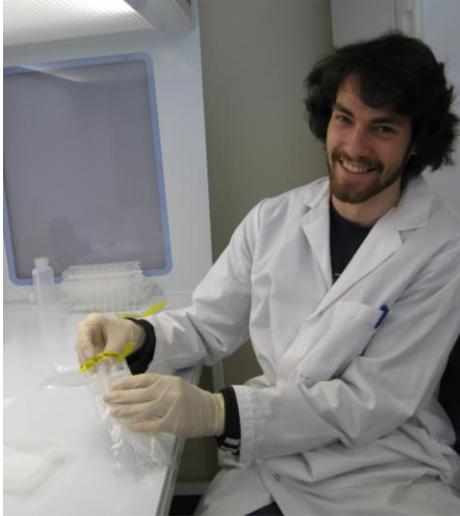
My name is Michelle Reeves and I am a student in Environmental Biology with a specialization in Wildlife Biology. Due to my passion for animals, wildlife especially, it is no surprise that I was looking forward to my internship at Le Nichoir, a wild bird rehabilitation centre in

Hudson, Québec. Le Nichoir is a non-profit organization whose mission is to nurse wild birds brought in by the public back to health and release them into the wild once they are ready. I was drawn to Le Nichoir because of its inspirational mission and the fact that they dealt with truly wild animals. With this opportunity at Le Nichoir, I could handle wild animals and help them on their way back into their natural habitat. I felt like it would be a genuine look into what the future held for me with a career in wildlife biology.

On a normal day at work I would start feeding the birds as soon as I arrived, then once everyone was fed once, I would start cleaning their cages, something we had to do twice a day. That took care of the inside birds, then we had to head outside. We had to replenish all their food and water, and then clean their aviaries. We had to sweep, hose down, scrub and squeegee all the asphalt floors and scrub under their play areas or mats. In between 12 and 1pm, we had to give all the birds their required medicine. Some of them needed pain killers; others needed antibiotics or antifungal's. They were either given orally or by injection. In the meantime, we had to keep up with feedings. Each bird had a specific time interval at which it had to be fed. It could be as little as every fifteen minutes for the tiny newborns or every three hours for the adult injured birds on their way to recovery. On top of all this, we also had to do admissions for all the new birds people would bring us that day.

"It's a great way to test the waters. You can confirm whether or not a subject or a career interests you and if you're lucky and it does, then you've just gained experience!"

I would definitely recommend an internship to any student looking for some experience. This is where you figure out your strengths and weaknesses and work on them. This is where you learn all the valuable lessons that will save you in the workplace. This is where you make connections to people that value your work and are ready to lend a hand in the future. An internship, whatever field it is in, will give you an edge like no other.



[Nicolas Fabien-Ouellet](#)

INRS-ETE (Institut National de la Recherche Scientifique)
Québec

U1 Bioresource Engineering

After a year of travel in Africa (Kenya) and Southeast-Asia I decided to study Bioresource Engineering at McGill University. During my travels I had been sensitized to the issue of water quality and availability. It is for this reason why I am following the concentration of soil and water in my degree. After finishing my first year of study, I wanted a summer job that could help me gain experience in that field. The

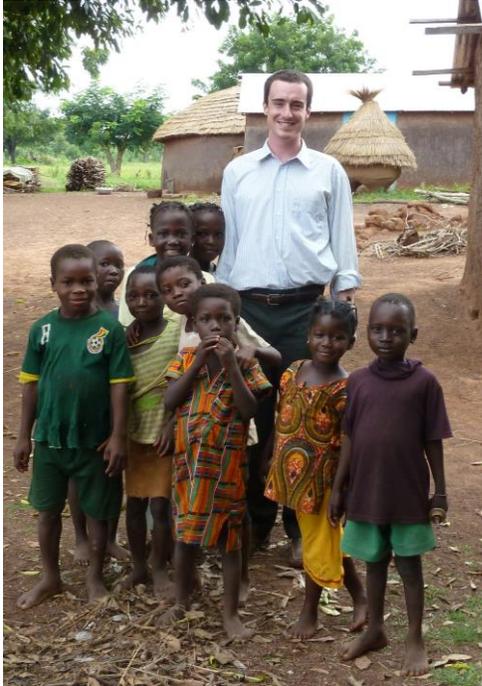
Institut de Recherche Scientifique du Québec (INRS), is an institute of the Université du Québec, which focuses on water and environmental issues. I went on the INRS-ETE website and found a research project that interested me. I later received an email from Dominic Ponton, a PhD student, saying he wanted me to be his intern for the summer. Dominic is working under the supervision of Dr. Landis Hare about the selenium concentration of lakes in regions where the mine industries have been active.

My role as an intern was simply to help out two students doing their PhD (Dominic and Maikel). During the first week we prepared the materials needed for the field work. This involved a lot of recipients washing with acid and pure water. In the field, my tasks were still assisting them: driving the truck or boat and help taking samples. I asked Dominic if it would be possible for me to do a small project and he put me in charge of the centrifugation process of the lake water for every lake analyzed. This later led me to do what we called the “fish project”.

“It’s a way to get a lot of knowledge that you cannot gain in regular classes during your session. It’s a good way to see what you like and what you do not like (field work vs. laboratory for example) and it’s a good way to make contacts”.

We wanted to see where in the food chain selenium was amplified and the centrifugation of the water was one of the steps.

This internship gave me the opportunity to learn how to drive a truck with a trailer and a boat. I saw how samplings were done and learned a lot about lakes (e.g. organisms in the lakes are not found at the same place during the day or at night). I am also in the process for learning how to properly write a scientific article. I achieved my overall goal of getting an internship in Québec city on water, plus I gained field knowledge. This internship had the ability to shape my future career in different ways. I now have the NSERC scholarship on my résumé and will eventually have a scientific article as well. This internship helped me specialize in the field of water. As this is the domain I wish to work in later, this internship was a good introduction for me.



Pascal Genest Richard

Engineers without Borders Canada

Tamale, Ghana

U2 Bioresource Engineering

I am naturally inclined to look for adventures wherever they are. I am very much interested in agriculture and its issues all over the world as poverty and overpopulation are still growing. After a few months in my first semester, I realized that engineering was not enough. I decided to join Engineers without Borders (EWB). In two years, I learned a lot about Africa, poverty, and the development sector. EWB's motto is *Building a world of opportunity*. For me, this has meant the opportunity of improving many skills like teamwork and public speaking, but also the opportunity of

being sent to Ghana for a 4-month internship working in the agriculture sector. In Ghana, EWB has partnerships with local non-governmental organizations (NGOs) as well as with the Ministry of Food and Agriculture (MoFA) and with many District Assemblies managing education, health, and rural infrastructure.

I was embedded in two agricultural businesses in the town of Tamale. Those two businesses provide ploughing services to farmers on credit at the beginning of the season, when money is scarce and land preparation is a matter of food security.

Farmers register and pay a symbolic fee for the peace of mind related to knowing that fields will be ploughed when the first rains come. Upon harvest, farmers pay back in bags of grain. No money is involved in the transaction, unless the farmers decide to sell the rest of the harvest to the company. That final step is key as farmers normally rely on market women to sell their produce, an avenue that is risky and not very profitable. As an intern, I had to test some assumptions and scope the needs of the businesses. My task was to recommend interventions for the project I was partnered with. That was the first time that EWB had a partnership with IFDC, and therefore it was my responsibility to build trust with the staff so that more volunteers can be involved in the NGO's projects. A lot of funding comes into international NGOs, and it is EWB's belief that influencing those NGOs' projects towards a more grounded approach is one of the ways for us Westerners to have the greatest impact on poverty.

"This internship helped me explore new ways of finding a meaning to life..."

The skills I put into use were gained out of the classroom, travelling and getting used to integrating in new communities and learning a foreign language. One needs to be very adaptable and enthusiastic about meeting new people and stepping out of the comfort zone.



Pascale Blais

Aliments Fontaine Santé

St-Laurent, Québec

U2 Food Science & Nutritional Science

As long as I can remember, I have always been passionate about cooking and self-conscious about healthy eating. I had the opportunity to work for approximately four months at Aliments Fontaine Santé as a Research and Development Assistant. The company is mainly known for its various vegetarian products such as their hummus line, ready-to-eat salads, dips and vegepate. It is their 'all natural and healthy' approach that mark out their products over the Canadian and American markets. The latter explains my desire to join the company, to encourage and promote the development of nutritious food and healthy eating. As a R&D assistant, my goals were to reduce the sodium content of the 13 salads as well as to modify the texture of the vegepate to a more spreadable product. To achieve these projects, I had to go through many steps to organize my work and minimize errors and repetitions.

I feel that I gained a lot of confidence in the kitchen as my stage progressed and I was able to suggest new recipes that were pleasantly received and revised by my supervisor. In the beginning, I lacked confidence and required more time to complete recipes without making mistakes. As the modifications and refinement of the recipes proceeded, I was able to move more rapidly in the kitchen and finish all the steps in a shorter period of time. I also gained great knowledge in terms of food preservation and shelf-life of products. The fact that the addition of food additives is prohibited confers a considerable challenge when you wish to extend or offer a similar shelf-life as the competitor's product. I also became more familiar with analysis techniques such as moisture and pH analysis. It was two principles that I already learned in class so I felt at ease from the beginning of these procedures.

"I would recommend to all students in that field of study to complete at least one stage to have an overview of the functioning of the food industry and, hopefully as I did, to become even more motivated and enthusiastic about my future career".

As a conclusion, my experience at Aliments Fontaine Santé gave me the assurance that I found the perfect program for me. It fits right with my love for food and healthy eating, as well as making the greatest use of my creativity and scientific-thinking.



Peter Tikasz

Peintures Étudiants

Montréal, Québec

U1 Environment - Renewable Resource Management

I am majoring in the Renewable Resource Management. I am mostly interested with the links existing between the environment and management, such as forest and waste management. Last fall I applied for the Summer Management Program, which is intended for university students who want to learn how to run their own business. The mission of the company, located in Toronto, is to have students run

their own franchise which consists of: developing and implementing a business plan; recruiting and managing the staff; marketing and advertising a business; learning how to manage a business; learning how to control costs and analyze financial statement. Overall, an average student runs a company worth \$ 40 000.

I chose this employer for my internship, since I knew that once I finish my B.Sc., if I don't apply for a graduate study, I will go work. Since I am in Renewable Resource Management, I will have to work with different companies with different types of employees in different sectors. I was also interested to know how to run a business. I wanted to have a global view of it and this gave me the perfect opportunity.

“Through this internship, I learned how to be independent. It helped me to discover what I like and what I dislike about running my own business”.

My job consisted of marketing, purchasing the paint and material supplies, collecting the payments, doing the payrolls, hire, train and create a schedule for my painters, sign contracts and making sure the clients are satisfied with the job.



Quinn Burke Anderson

John Deere and Company

Moline, IL

U1 Bioresource Engineering

By a stroke of luck, I found a position with John Deere in April. This summer, I worked at one of the several U.S. facilities; the J.D. Harvester Works (JDHW) factory in East Moline, IL. The factory is quite the sight; at 3.2 million

sq. ft. it's hard to take it all in at once.

I spent the summer working underneath Ramiro Galvan, who is a supervisor of engineers working on front-end equipment. Harvester Works (HW) manufactures large harvesting combines which range from \$250,000 - \$400,000. The factory also manufactures detachable front-end harvesting equipment which are specially designed units used for harvesting corn, soy, or wheat.

My main project for the summer was facilitating and implementing a service parts transfer from departments 114 and 115 to the SPO. In addition to this task, I supported Paul Hernandez in his day-to-day work including work center redesign and restructuring, aiding fabricators in their daily manufacturing responsibilities, updating routing numbers, and investigating quality issues and defects. In short, my personal responsibilities involved pursuing my main projects to completion as well as providing any needed support to the department in their day-to-day operations.

"Internships should be a central focus for students in all disciplines. Nothing beats experiential learning... Internships are a great dose of the real-world."

Some of the highlights of my short summer experience included small accomplishments and educational conversations with other engineers. In other words, I think the highlight of my summer was the overall exposure that I received to the professional engineering world.



Rebecca Chin

City of Pointe-Claire, Engineering Department

Pointe-Claire, Québec

U3 Bioresource Engineering

I initially entered Bioresource Engineering due to my environmental inclination. I have however, been intrigued about the more human impacts that this program could provide such as food security through the use of my engineering skills.

This past summer, I worked at the City of Pointe-Claire in the Engineering Department. As a municipal service, the responsibilities of the Engineering Department

include preparing construction plans, putting projects out to tender, awarding contracts and supervising the contracted work. Their mission is to provide services to the citizens of the City, namely infrastructural services such as potable water, sanitary and storm water sewer systems as well as road repairs. I figured that working in the Engineering department would provide me with opportunities from which I could learn and draw from for my future employment.

Having worked there last summer, I expected a similar experience: surveying streets for the most part. However, I was pleasantly surprised to be faced with new challenges. Although surveying needed to get completed throughout the summer, which is the primary task for the student interns, I was also placed on some construction sites. I was a construction site Inspector; supervising the work and ensuring that it was carried out in accordance with the City's expectations.

"I would definitely recommend that other students participate in internships because it provides one with a lot of exposure to areas within their field. As for internships as a whole, it's a great experience that is very hard to get anywhere else, so go for it!"

I got to see a lot of new and interesting things—it felt as if my whole summer was one big field trip, a great learning and hands-on experience! I saw how trenches are dug and supported, how pipe connections are made, how sidewalks and curbs are formed and poured and how aqueducts are inspected. Since it was my second summer, my boss gave me the responsibility of leading the other students. I was in charge of teaching two other students how to use the surveying equipment and how to process the data.

What I will take from this job are the soft skills that I developed throughout the summer; asking questions, delegating work, supervising jobs, communicating between different parties and clarifying the specifications of a project. It was great being in the engineering environment, with the problem-solving atmosphere and seeing how projects are approached and completed.



Rebecca Rolph

Scripps Institution of Oceanography

San Diego, California

U3 Environment Water Environments and
Ecosystems Domain

My research experience this semester helped me to get a view on what I would like to pursue in graduate school. I am interested in marine chemistry, and marine geosciences. My internship this summer was based in marine chemistry, and the lab I worked in develops marine chemical sensors.

Scripps Institution of Oceanography is a graduate research department of the University of California, San Diego. They are a world-leading research institute for oceanography. They are focused in the Earth Sciences, with several main focuses: Climate Science and Physical Oceanography, Marine Biology, Marine Natural Products, Geophysics, Marine Conservation Biology, and Marine Geosciences. I was part of the Marine Geosciences division, specifically in the Marine Chemistry group. Marine chemistry is an essential part of understanding the environment, and also for climate change.

Ocean acidification is a topic I am most interested in, and the understanding of the ocean acidification process and its ecological effects are very important when it comes to developing policy aimed at protecting the environment.

“I feel like I have gained a lot of important preparatory experience and lessons for graduate school, and am very appreciative that I was able to participate in this internship”.

This internship helped shape my career because it provided me with the opportunity to speak with many prominent scientists who are active in the field I am interested in—marine chemistry and geochemistry. Scripps Institute of Oceanography is a world leader in its field, and attracts some of the best-known scientists. This gave me a unique opportunity to discuss graduate school, and also illuminated different paths that are available after graduate school. I am hoping to return to Scripps after I graduate McGill, and this internship gave me the chance to introduce myself to the people there that would be potential employers.

I think the most important thing I got out of the internship this summer was not only a self-confirmation that I really do want to pursue marine chemistry in graduate school, but also that I want to use the experience I have in graduate school in order to make a significant contribution to the field of oceanography.



Sabrina Bergeron Quirion

Agriculture & Agri-Food Canada

St-Hyacinthe, Québec

U2 Food Science

My internship was at the Food Research and Development Centre in St-Hyacinthe. It is part of 19 research centres of Agriculture and Agri-Food Canada. In general, their mission is to conduct and develop methods to preserve food and enhance food quality. They are also concerned about the

health aspect of food and its nutritional values.

I chose to work for this organization because it seemed like a good opportunity from the beginning. I think that working in a research lab with professionals is the best experience that a student can hope to have. It's just like working "behind the stage". I saw the bases of research, how to plan a research project, how to run it, how to collect data and how to process them to finally obtain a research paper. Before the summer, the research project was not clear for me. Also, even though I was saying that I wanted to work in research, I had no idea what it implied. Now, I can say that I did it for a summer and I loved it!

My internship can be divided into two parts. Firstly, I worked in lab in order to discover and obtain physical properties of fresh-cut and ready-to-eat lettuce. In general, I was the first one trying to obtain this kind of information for lettuce which made my work harder. Secondly, I was in the field in order to collect temperature data concerning food transportation. During this part of my work, I had to communicate and plan the road tests with many of our collaborators.

This internship helped to shape my future career because it showed me different situations that I am going to have to deal with all through my life. Research is mostly about team work so the fact that I had to communicate with many people during the summer helped me to improve my communication skills. Also, I often had to work by myself and I had to organize different tests. I think that in the future, if I am going to work in research, the structure is going to be similar. This is why I am happy that I had the chance to "taste" this kind of work, which was different from any other job that I had in the past.

"I recommend any motivated students to participate in the internship program because it was for me one of the greatest experiences in my life...it changed the meaning of the word "working" because I was a lot more motivated to go work since I liked what I was doing".



Sadman Islam

Research Project on the Macdonald Campus
Ste-Anne-de-Bellevue, Québec
U2 Bioresource Engineering

I can't imagine that summer has finally come to an end. It seems like only yesterday that I joined the power duo made up of me and Blake, to get started on the Rainwater Harvesting project of the Mac Market in hand. However, as I say goodbye to some of the best 4 months of my life, I also look back on the setup of our irrigation system with a smile on my face. Needless to say, I have learnt a lot of different things this summer, ranging from piping to electrical to airflow handling and microbiology.

The Rainwater Harvesting project is the first of its kind on the Macdonald Campus under the McGill Sustainability fund. The basic concept of the project was to collect rainwater from the Mac Market roof and use the water to irrigate the Mac Market greenhouses.

It's always a great feeling when you watch something that you built with your bare hands, functioning. The joy that I felt when I stepped back to take a look at the entire setup at the end of summer is incomparable to anything else that I have ever felt. Although there were challenges and days when you felt like the world was against you, all I had to do was march on and complete the task that was assigned to me. As an engineer I feel that it is very important to do that. Failures are just a

"I highly recommend everyone to participate in the internship program as it is a great opportunity to improve one's knowledgebase and it also helps in improving one's network. It is a great opportunity to apply one's self and to finally put some of the text book knowledge to a real life test".

part of the eventual success that looms beyond the horizon. Engineers build, straight and simple. What I have done this summer, was to set up a sustainable irrigation system. Sustainability is a key aspect which should be kept in mind in order to move forward to a better future. This is just a small demo that has been set up at Mac for everyone else to see and implement in their lives.

This internship has provided me with an invaluable work experience, ideas about green technology and most importantly the opportunity to work alongside some of the brightest minds here at Mac and also a large group of people all across the continent. It should go without saying that I will cherish the memories of this summer forever and I hope to implement the knowledge that I have obtained in my future career.



Shane Wood

Macdonald Campus Horticulture Centre
Ste-Anne-de-Bellevue, Québec
U1 Agro-Environmental Sciences

My summer internship was at the Macdonald Campus Horticulture Centre. Their mission is to provide an area for research, development of new plant breeds, development of new horticulture practices, a teaching aid, a horticulture farm that sells food to the community and Macdonald students, and as of

recently, the farm is providing some of the produce for downtown McGill campus residence kitchens.

My interest in working with the Horticulture center was to get a good basic understanding of running a horticulture farm and to learn horticulture practices. I already have some experience with beef cattle production based on a cattle feed lot setup but this was the first time I had worked with plants in any way. My boss, Mike Bleho, tried to provide a broad experience for all of us. My duties included increasing inventory of plants through different propagation methods, driving the tractor while pulling a machine designed to assist with planting, field maintenance, setting up irrigation, harvesting various produce, setting up tunnel green houses to extend the growing season and managing a small team. I also assisted in planting research plants, this year being sweet potato, assisting with harvesting beans for research, and processing those produce products that needed extra steps before being market ready.

The largest project we took on was called 'McGill Feeding McGill'. This is a project in which the Horticulture Centre would provide large quantities of produce to the chefs at the downtown residence kitchens. This is a great project for the Horticulture Centre because it provides a greater purpose to the Centre and also provides fresh produce from a local source to students in the residence. This is also very beneficial financially for both the Horticulture Centre and the McGill residences.

I gained a number of skills this summer including, a better understanding of growing tomatoes in a greenhouse and field environment, dealing with horticulture production with non-ideal weather conditions. I learned different reproduction methods for various produce such as tomatoes, watermelon and peppers, the setting up of basic irrigation, when to harvest produce like melons, garlic, as well as other things. I would definitely recommend this internship to other students.

"This internship has shaped my future career in a very general way. It was a chance for me to learn different things about having a horticulture farm, some of the work involved on a small scale operation and learning to find or develop a market. The job also offers ample opportunity to learn many new skills and further knowledge already gained if one wishes to pursue those opportunities".



[Thomas Ammerlaan](#)

[Nautilus Eco-Civiel B.V.](#)

Heiloo, Netherlands

U3 Bioresource Engineering

This summer I completed an internship with Nautilus Eco-civiel b.v., a Dutch company based in Heiloo, North Holland. Nautilus calls themselves the “eco-green construction and bio-civil specialists”. Practically, Nautilus constructs gabion structures in all kinds, shapes and sizes for applications in water bank protection, erosion control, soil retention,

sound insulation and aesthetical concrete wall cladding. Gabions are essentially steel baskets filled with rocks and other frost-resistant materials.

As an intern, they assigned me tasks related to all sides of the business. I started with the calculation of the carbon footprint of the sound insulating walls they built. This proved to be a far greater challenge than anticipated, mostly related to obtaining information in a foreign continent in a foreign language. Aside from this, I was involved in the construction of gabions, the installation of Aquaflora mats, general delivery of supplies to work sites, tender creation, document translation, facilitating communication with French suppliers, and I even got a taste of project supervision in France.

The extent to which my academic background helped with my internship was significant. Evaluating technical drawings, drawing with technical software, basic academic researching skills, general construction and agricultural knowledge all contributed to my success during this summer.

At the company farewell dinner, I found myself stating that no market-oriented university education is complete without an internship. The opportunity to establish links between theoretical knowledge gained in the classroom and practical observation and execution in the field is invaluable. Internships consolidate theoretical education, and they can just be fun! I recommend other students to gain practical experience in their respective fields of study and interests.

“Participating in this internship most certainly helped shape my future career in the sense that the experience and skills gained helped shape confidence and self-respect. Having been given much responsibility and gaining the respect of colleagues creates a precedent on which one can fall back and rely on when times get more challenging”.



ZhenYang Liu

Four Green Steps

Montréal, Québec

U2 Environment

The company I had my fabulous internship at is a place called Four Green Steps. The company hosts a website involving a combination of non-profit and profit marketing. It has four missions, which are ingeniously separated into four domains on its website: School Program, non-profit; Community, non-profit; Infozone, non-

profit; and School Program, the profitable section of the website. The School Program is what Four Green Steps focuses the most on, as 50% of its profits go towards building a better environmental awareness curriculum for over 700,000 students around the globe. The Community provides a space for casual viewers to obtain useful green lifestyle tips like vegetarian recipes and green DIY projects. The Infozone is a place to read articles about environmental issues or to gain some environmental knowledge. Finally, the Marketplace boasts tens of thousands of eco-friendly products, claiming the title “Largest Green Market in the World”.

I chose my employer for my internship because of the company’s dedication in making the world a better, greener place. As an intern in the content section, my main duties were to generate articles for the Infozone and social networking. Social networking was certainly one of the most entertaining duties of the internship, because I get to see many different websites. From food-related to health-related, I had viewed websites of just about any category because our Community, Infozone, and Marketplace have articles or products that are related to about any field.

“I would totally recommend other students to participate in the internship program at Four Green Steps, simply for the welcoming environment, friendly co-workers, challenging assignments, and the meaningful motivations the company envisions...the experience alone is priceless”.

My goals before I started this internship were to experience real life, to know what it is like to work in a disciplined office, and improve my interpersonal skills. I have certainly achieved my goals; better yet, I even got more than I expected. Team working and interpersonal skills are a common element recruiters seek in job applicants, and Four Green Step had given me a wonderful platform to acquire these skills.