

825 McLeod Ave.
Apt. 105
Fredericton, NB E3B 9V4
(506) 449-1954
x91d4@unb.ca

May 5, 2004

Ms. Trish Meng
Coordinator, Co-op Program
Faculty of Computer Science
University of New Brunswick
P.O. Box 4400
Fredericton, NB
E3B 5A3

Re: January – April 2004 Co-op Work Report

Dear Ms. Meng:

This is my fifth Co-op work term report which outlines my work at Natural Resources Canada's Canadian Forestry Service from January to April 2005.

The Canadian Forestry Service (CFS) is a federal government agency that conducts research in collaboration with companies and organizations on forestry and forest management. The CFS presence in Fredericton works to sustain the health of New Brunswick's forests as well as the rest of Canada's forests. The researchers working out of CFS, Fredericton are currently studying many different forestry areas including Spruce Budworm Outbreaks and Forest Regeneration.

This report articulates my activities and duties while working with the Decision-Support Systems group at the Canadian Forestry Service, Fredericton. My growth in terms of knowledge and experience is also described in this report. As I had limited knowledge of Visual Basic for Applications prior to this work term it was a very rewarding gain this experience. My work term supervisors, Mark Budd and Kevin Porter, have commented on the report in my Work Term Evaluation and have reviewed it with me.

Sincerely,

Brad Touesnard

Encl: Work Term Report

**University of New Brunswick
Faculty of Computer Science**

Co-op Work Term Report

Student Name: Brad Touesnard

Student ID#: 3060899

Employer: Natural Resources Canada,
Canadian Forestry Service

Work Address: P.O. Box 4000
Fredericton, NB
E3B 5P7

Work Supervisor: Mark Budd
Kevin Porter

Work Term Dates: 2004 January 5 – 2004 April 30

Work Term Report #: 5

Submission Date: 2004 May 7

Introduction

From January 5th, 2004 to April 30th, 2004, I continued my experience in the Co-op program at Natural Resources Canada's Canadian Forestry Service (CFS) located in Fredericton.

During my work term with CFS, I developed an application to generate datasets, setup a server with a source code control system and issue tracking software, and performed minor upgrades and bug fixes on the decision-support software.

Summary

During my work term with the CFS, I was mainly responsible for developing a Visual Basic (VB) application to produce datasets for testing the decision-support software. I also spent some time working on the decision-support software itself, performing bug fixes and small enhancements. I was also given the task of setting up a Linux server with the Concurrent Versioning System (CVS) to manage our source code. In addition, I setup a web server and database to run an issue tracker web application. The CFS staff was friendly and approachable at all times, and were very helpful when needed.

As I had worked with VB Script during a previous work term, one of my goals at the beginning of this work term was to enhance my skills with Visual Basic for Applications. As with any work term, you hope to absorb some knowledge from co-workers and managers and I was able to do just that during my work term. At the CFS I was able to gain lots of experience with Visual Basic and COM development as well as an abundance of knowledge in forestry. Overall, I was able to achieve my goals during my first four months, however there is always more to learn and I plan to continue my learning experience during my next four months.

The work term environment at the CFS has been very comfortable and enjoyable. The

people are friendly and knowledgeable, and the facility presents a rich atmosphere. Since I had previous experience with Visual Basic, I felt adequately prepared for this job. Since this is my fifth work term, I knew generally what to expect in a professional IT environment so there were few surprises. I had no trouble whatsoever adjusting to the CFS environment.

Professional Development

This work term has enabled me to develop my programming skills in Visual Basic for Applications and COM. Prior to this work term I had only coded a very simple VB application for a previous employer. I am very happy to have had the opportunity to explore VB 6 before VB .NET completely takes over. I believe that I have been able to develop as an emerging professional as my programming skills have matured and I have experienced another working environment.

At the beginning of this work term there was a need to review some documentation to get up to speed on the development technologies in use. During the first week I had the opportunity to read about the ESRI ArcGIS software being used, the Component Object Model (COM) and the interface provided by the ArcGIS software. This was the first time I actually got to develop directly with COM and also the first time I had worked with GIS software. I have learned a great deal about GIS and how it is being effectively used in forestry.

The staff of the CFS was highly skilled, knowledgeable, and experienced. Working with such a group of individuals enabled me to considerably improve my technical knowledge and interpersonal skills. I am happy that I was able to contribute a little of my own knowledge and experience in web development after absorbing so much.

Conclusion

I believe that my fifth Co-op work term was an overall success and I am looking forward to my next four months with the Canadian Forestry Service.