# Title: Bioinformatics Software Developer

## Number of Positions: 1

## Length of Internship: 8 to 16 months

## Work Location: Ottawa

## About Us

We are Microbial Biodiversity Bioinformatics group within Science and Technology Branch of Agriculture and Agri-Food Canada (Federal Government). We are a dynamic small team that supports agriculture scientists with the computational side of their research as well as data infrastructure. Our day-to-day tasks range from interacting with scientists to collect their research requirements, to researching and working with novel technologies to create bioinformatics tools and platforms, to installing and supporting grid and cloud computing, necessary for the big data research. Located in the historic Experimental Farm close to downtown Ottawa.

## Project Overview

The successful candidate will continue on-going development of Bioinformatics tools and systems oriented towards the manipulation and dissemination of biological data.

Development is generally geared towards high-end Linux servers with large amounts of processing power and memory. As an example a single node in our cluster computer has an 80 core CPU and 1024GB of RAM.

The successful candidate will gain software development experience in Perl, Bash, Python, and/or Java and other web-based technologies. In addition, the successful candidate will also gain experience in Git Source Code Management system, writing software documentation, and the science behind the data they are working with.

## Responsibilities

* Develop, test, integrate, and document bioinformatics tools and software.
* Employ the software development life cycle and best practices including version control, bug tracking, issue reporting, and code reviews.
* Consult and provide feedback to management.

**Educational Requirements**

Minimum 2 years of education in a University program such as Computer Science, Systems Engineering, Software Engineering, or Bioinformatics. A combination of related education and experience may be considered sufficient.

## Required Qualifications

* Self-motivated individual with eagerness to learn
* Creative and visionary individual that can develop new ideas
* Ability to work with a multi-disciplinary group of software developers and system administrators

## Asset Qualifications

* Experience in one of the following programming languages: Bash, Perl, Python, Java
* Experience in one of the following web technologies: HTML, XML, JavaScript, XSL/XSLT
* Experience in one of the following source code management systems: SVN, Git

## Minimum Qualifications

* Must be a Canadian citizen
* Must pass the Government of Canada Security Clearance
* Must successfully complete any required training, testing, or orientation courses

## Learning Opportunities

* Learn to develop Linux software and improve your Linux skills.
* Improve your bioinformatics knowledge
* Learn version control and issue tracking systems.