

## **Development of an Online Database Tool for Locating Bioinformatics-Related Software**

### **ABSTRACT**

This report details the development of an online database tool for locating bioinformatics-related software. The site draws from the strengths of existing online software search tools such as Freshmeat and SourceForge, and is called the *Bioinformatics Software Database*, or *BioSoda*. The database is designed in a way that minimizes storage space while maximizing query speed. Data Definition Language (DDL) and Data Manipulation Language (DML) have been written to create the database and populate the tables. The user interface is designed using Extensible Hypertext Markup Language (XHTML), which provides webpage code that is easily parsed, and Cascading Style Sheets (CSS), which makes changes in format relatively simple to implement across an entire website. The interface allows users to browse through a function-based tree, apply filters to a search, or look for software using keywords. Work yet to be completed includes writing Perl scripts to query the DB2 database and generate the XHTML webpages, and assessing bioinformatics software packages so that their records can be added to the database.