HServ and SNPly: a software infrastructure and a web agent for linking information on genetic variation

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Motivation

The availability of public, complex and growing sources of data is a common trait of current research on human genetic variation. As a consequence, information increasingly needs to be located, filtered and pieced together.

Methods

HServ is a software framework for the quick development of web-agents in charge of collecting, gluing together and processing data from heterogeneous and possibly varying sources. Such agents should act both as a web server and a web client. They may react to user requests performing a variety of automatic remote searches, then extract appropriate contents, process filtered data, and eventually publish their responses on web pages. HServ is a collection of modules written in Haskell, a pure functional language. It is intended as a lightweight toolset for experimenting with different data-mining heuristics.

Results

SNPly, a web-agent devoted to the exploration of public databases and literature concerning SNPs, is being built on the basis of HServ. SNPly looks for semantic intersections in data from distinct sources, thus allowing researchers to detect implicitly related pieces of information which are not expressly linked to each other.

Availability: http://www.snply.org/

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