Postdoctoral Fellowship in Usable Linked Open Data

Position Summary

In *Information Management: A Proposal,* Tim Berners-Lee described a global hypertext system, the aim of which "would be to allow a place to be found for any information […] which one felt was important and a way of finding it afterward. The result should be sufficiently attractive to use, […] so that the usefulness of the scheme would, in turn, encourage its increased use".

Naturalist and conservationist John Muir wrote that "when we try to pick out anything by itself, we find it hitched to everything else in the Universe." In this age that values commodification and abstraction, the interconnections between concepts are broken as a matter of course. Linked open data is a means to reinforce and restore the interconnectedness of concepts.

The postdoctoral fellow will work under the direction of Dr. Daryl Hepting to conduct research aimed at addressing the usability of linked open data with a specific focus on realizing Sterling's concept of a spime (coined from the words *space* and *time*) for the semantic web where the "overwhelmingly extensive and rich informational support" for an object can emphasize its connections. One example of this approach is described in:

> D. H. Hepting, J. Jaffe, and T. Maciag. Operationalizing Ethics in Food Choice Decisions. *Journal of Agricultural and Environmental Ethics* **27,** 453–469 (2014). https://doi.org/10.1007/s10806-013-9473-8

The research to be supported by the postdoctoral fellow will include the implementation and evaluation of a spime for chicken eggs that supports sustainable consumption and production (http://metadata.un.org/sdg/12?lang=en) and applying the lessons learned to realize other spimes, for example, supporting climate action (http://metadata.un.org/sdg/13?lang=en). The postdoctoral fellow will have some flexibility within this research to pursue related projects.

The initial appointment for the postdoctoral fellow will be one year, with the ability to renew the appointment on a yearly basis based on performance, up to a total of three years. The postdoctoral fellow will spend 80% of their time on duties associated with this position, with the remaining 20% (one day per week) dedicated to other research-oriented "passion projects", following Google's "20 percent time" philosophy.

In order to assist the postdoctoral fellow with their academic career development, the postdoctoral fellow will be assigned to teach two graduate-level courses in the area of human-centred computing each year of the appointment. The specific topic and details of the courses will be based on the postdoctoral fellow's expertise and skillset, and will be developed and delivered under the guidance of Dr. Daryl Hepting.

Position Requirements

- Ph.D. in Computer Science or closely related discipline, and with a specialization in Human-Computer Interaction or the Semantic Web
- Excellent interpersonal and leadership skills
- Proven ability to work within a research team as well as independently
- Excellent oral and written communication skills in English
- Experience in conducting human-centred research (e.g., conducting literature reviews, developing research questions and hypotheses, designing user studies, preparing research ethics applications, collecting qualitative or quantitative data, analyzing qualitative or quantitative data, disseminating research results)
- Experience in the dissemination of the outcomes of research, with a record of at least one research publication (and presentation) at a SIGCHI (https://dl.acm.org/sig/sigchi) sponsored venue
- Previous research that included the design, implementation, and evaluation of user interfaces is an asset
- Previous research using mixed-methods is an asset
- Previous experience in the design and implementation of web-based software is an asset

Salary

$60,000 annually; increasing to $62,500 if the appointment is renewed for the second year, and $65,000 if the appointment is renewed for the third year.

Work Hours, Holidays, and other Work Conditions

As per CUPE Local 5791 (Research Employees) collective agreement (https://5791.cupe.ca/files/2020/04/2020-2023-CUPE-5791-Research-Employees-Collective-Agreement-tvh.pdf)

Start Date

The expected start date is January 1, 2022, but this is flexible (+/- one or two months).

Application Process

Candidates for this position must provide the following information: a cover letter that addresses the specific items in the position requirements; their CV; the transcripts from their Ph.D. and Master's degrees; a sample research publication which they have co-authored, from a SIGCHI (https://dl.acm.org/sig/sigchi) sponsored venue; and two letters of reference (one must be from their doctoral supervisor or supervisory committee member).

All of this information should be packaged together in a zip file, uploaded to a cloud-based file repository, and the link emailed to daryl.hepting@uregina.ca. Please use the following in the subject line: "usable LOD postdoc application". Applications will be reviewed as they arrive, and interviews will be arranged for promising candidates as soon as possible. The position will remain open until filled.

Inquiries about this position may be made via email daryl.hepting@uregina.ca.

Diversity Statement

The University of Regina is committed to an inclusive workplace that reflects the richness of the community that we serve. The University welcomes applications from all qualified individuals, including individuals within the University's employment equity categories of women, persons with disabilities, members of visible minorities, Indigenous persons, individuals of diverse gender and sexual orientation and all groups protected by the Human Rights Code.