

Two Postdoctoral Fellowships at the University of Calgary, Alberta, Canada

Two postdoctoral fellowships focused on application engineering of data-intensive multi-surface systems are available at the University of Calgary. One position can be filled immediately; the second position must be filled before the end of 2013.

Postdoctoral fellows will have substantial freedom in choosing their research focus as long as it aligns with designing and developing multi-surface systems as well as an application focus on IT support for the natural resources industries. For example, cloud computing and the software engineering challenges associated with it are core research topics. In order to handle data proliferation, components for analytics middleware can also be within the scope of the fellowships. In the frontend, investigating the use of natural user interfaces, multi-surface environments and augmented reality to visualize and interact with big data in the field as well as in the control center are of interest.

More specifically, the postdoctoral scholars will assist our team to determine requirements and create prototypes of scalable data intensive Software-as-a-Service (SaaS) applications to support the natural resources industry. Such applications rely on effective strategies for handling large, complex data sets and make them accessible for collaborative teams.

The postdoctoral fellows will have research expertise and a strong technical background in one or more of the following areas:

- software engineering for the cloud, cloud computing, big data
- multi-surface systems, digital tables, natural user interfaces
- augmented & mixed reality

The postdoctoral fellows will work in the Agile Surface Engineering lab (<http://ase.cpsc.ucalgary.ca/>) at the University of Calgary. The group is part of the NSERC SurfNet Strategic Research Network (<http://www.nserc-surfnet.ca>). SurfNet is a Canadian research alliance of academic researchers, industry partners, and government collaborators. The goal of SurfNet is to improve the development, performance, and usability of software applications for surface computing environments: nontraditional digital display surfaces including multi-touch screens, tabletops, and wall-sized displays.

Fellows will have to engage in guiding undergrad and graduate in creating the tools that form a basis for the next generation of software systems supporting the exploration, extraction, monitoring and management of natural resources. As an outcome of the fellowship, international peer-reviewed publications are expected.

The postdoctoral scholars are also required to participate in developing competitive research grants.

Ideal candidates will have a systems focus and a keen interest to work with industrial partners.

To apply, please send the following information via email to Dr Frank Maurer, Department of Computer Science, University of Calgary, frank.maurer@ucalgary.ca:

- Curriculum Vitae of the applicant including publication list
- Two letters of recommendation

Applications are accepted immediately until both positions are filled. One position is funded by NSERC SurfNet, the second position is funded by the Postdoc initiative of the University of Calgary (<http://www.ucalgary.ca/risingstars/postdoc>).

Applicants who have obtained their doctorate degree (or equivalent) more than three years prior to the proposed start date (not later than December 2013) are not eligible (special conditions may apply if proper justification is provided).

Fellowship stipends are competitive and include a standard benefit package. More information, especially about Visas for postdocs, is available in the UofC Postdoc Handbook at <http://ucalgary.ca/postdoc/files/postdoc/PostdocHandbook2009b.pdf>