

## Intelligent Devices and Systems - Postdoctoral Fellow

Intelligent Technologies for Wellness and Independent Living (ITWIL) lab  
Department of Systems Design Engineering, University of Waterloo

**Location:** Waterloo, ON, Canada

**Date Posted:** January 6, 2018

**Closing Date:** Until filled

**Start date:** As soon as possible

### Description:

The Intelligent Technologies for Wellness and Independent Living (ITWIL) lab invites applications to the fully funded position of Intelligent Devices and Systems Postdoctoral Fellow. We are seeking candidates who have a strong background in human interactive systems, interface design, UI/UX, machine learning, and/or social computing and demonstrate a keen interest in applied technology development.

The successful candidate will join a multi-disciplinary research team led by Dr. Jennifer Boger that includes expertise in computer science, human factors, biomedical engineering, and applied health sciences. In addition to the University of Waterloo, we are affiliated with the Research Institute for Aging and the University Health Network. We work with a variety of academic and industrial partners and funding sources, including NSERC, CIHR, AGE-WELL NCE, the Alzheimer's Society, and the Government of Ontario.

Our research program focuses on developing intelligent computerised devices and systems that support health, wellbeing, and quality of life. A major strength of our research program is the combination of basic science, computing principles, and clinical research with collaborative product design and development. Our research employs cutting-edge technologies and computer science techniques to create innovative solutions that fit the needs of the people who are using them.

The successful candidate will provide support for projects involving a variety of technologies and systems, many of which leverage machine learning and artificial intelligence to create intelligent interactive systems. The candidate will assume a lead role on the *Dementia @work* project and will work with partners from Sweden, Finland, and Canada to create a novel digital tool for supporting people diagnosed with dementia who wish to remain employed. Other areas of research in the lab include ambient vitals monitoring, artificially intelligent web-based resource support, and intergenerational connectivity. The candidate will be expected to work with and provide mentorship to undergraduate, Masters and PhD students, as well as aid in the development of the research program in general.

The position is a fully-funded one-year contract, renewable based on performance and funding. Salary will be based on the applicant's previous experience and education.

For more information about our research, please visit our web site:

[www.itwil.ca](http://www.itwil.ca)



**Requirements:**

Candidates must hold a Ph.D. in computer science, human factors, systems engineering, or a related field. Other fields may be considered if the applicant has demonstrated an interest and ability for technical (e.g., mathematical or computational) research. Publication of significant research in high quality venues will be a top priority for successful candidates. The candidate must have a strong track record of systematic interface research and demonstrate knowledge of machine learning techniques. Expertise working with older adults and technology evaluation studies is an asset. Applicants must be familiar with conducting academic research and demonstrate strong leadership and project management abilities. The successful applicant will demonstrate an aptitude for communication and collaboration outside of his or her own field, with an emphasis on cross-discipline and cross-sector knowledge translation and mobilisation.

The University of Waterloo hires based on merit and is committed to employment equity. All qualified persons are encouraged to apply, however, Canadian citizens and permanent residents will be given priority.

**Application:**

To apply, please send a cover letter, curriculum vitae, a statement of your research interests (1-2 pages), country of citizenship and date of availability, and a copy of your university transcripts to:

Dr. Jennifer Boger  
Dept. Systems Design Engineering, University of Waterloo  
200 University Ave. W., E5 6<sup>th</sup> floor  
Waterloo, ON, CANADA, N2L 3G1  
E-mail: [jboger@uwaterloo.ca](mailto:jboger@uwaterloo.ca)

Submissions by e-mail are preferred. After an initial screening, select applicants will be asked to forward three academic and/or professional letters of reference.

