Title: Postdoctoral Fellow – Ambient-based physiological monitoring using video images

Location: Downtown Toronto, ON, Canada

Start Date: Immediately

Closing Date: Until the position is filled

The Artificial Intelligent & Robotics in Rehab Team at Toronto Rehab Institute – UHN and the Intelligent Assistive Technology and Systems Lab, University of Toronto

Description:

The Intelligent Assistive Technology and Systems Lab (IATSL) invites applications to the position of Postdoctoral Fellow to work in the multi-disciplinary research area of machine learning-Computer Vision and health informatics. The postdoctoral fellow will primarily work on our current research program on ambient-based physiological monitoring using video images. The position will be based at Toronto Rehabilitation Institute, University Health Network (TRI-UHN), University of Toronto.

The successful candidate will be co-supervised by Dr. Alex Mihailidis, Barbara G. Stymiest Research Chair in Rehabilitation Technology at the University of Toronto and Senior Scientist at TRI-UHN, and Dr. Narges Armanfard, Assistant professor at the Electrical and Computer Engineering Department of McGill University.

The successful candidate will join a unique multi-disciplinary, multi-centre research team led by Dr. Alex Mihailidis (University of Toronto/TRI) that includes several bioengineers, computer scientists, occupational therapists, speech and language pathologists, neuroscientists, clinicians, and mechanical/electronic technicians.

Our research program primarily aims at developing autonomous, intelligent computerised devices that can help people with disabilities live more independently. A major strength of the research program is the combination of basic science, computing principles, clinical research, as well as product design and development. Our research employs cutting edge technologies and computer techniques, such as stereo vision, partially observable Markov decision processes, and various other computer vision and decision making techniques.

The post-doctoral researcher position is fully funded for 1-year period. Salary will be based on the applicant’s previous experience and education.

For more information about our research, visit our web site: www.iatsl.org

Requirements:

We are seeking candidate with the following qualifications:
- Must hold a PhD in Computer Science / Computer Engineering or related area. Applicants who have fulfilled all the requirements for PhD award may also apply.

- Advanced knowledge in computer vision, machine learning, deep learning, big data and predictive analytics.

- Experience in physiological signal processing, such as ECG, PPG, etc.

- Strong programming skills in MATLAB, Python.

- Excellent publication record in top quality journals/conferences will be given high priority.

- Possess excellent communication skills and demonstrate strong leadership skills.

TRI-UHN hires based on merit and is committed to employment equity. All qualified persons are encouraged to apply.

**Application:**

Applications will be accepted until the position is filled. To apply, please send a one page covering letter highlighting the relevance of your skills, knowledge and experience to the above mentioned position, curriculum vitae, including full publication list, a statement of your research interests (1-2 pages), country of citizenship and date of availability, and a copy of your university transcripts and email to alex.mihailidis@utoronto.ca with the subject line “Postdoc at TRI.”

**Dr. Alex Mihailidis**

*Intelligent Assistive Technology and Systems Lab (IATSL)*

*University of Toronto*

*160 – 500 University Ave.*

*Toronto, Ontario, CANADA, M5G 1V7*

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