

Our multi-disciplinary neuroimaging research group is seeking an **Image Processing Software Developer**, for a one-year full-time contract position (with the possibility for renewal), who will be responsible for assisting with the development of multi-modal brain image processing software for stroke and dementia research.

Responsibilities

- Assist with the development of advanced machine learning models for brain image segmentation, registration, and morphometry for day-to-day image processing
- Design data analysis workflows incorporating existing tools and refinements
- Contribute to research projects
- Facilitate the process of software building, testing, packaging, and distribution
- Create and maintain documentation for developers and end-users

Requirements

- Post-secondary degree in computer science, engineering, or medical biophysics
- One or more years of work experience in software development
- Advanced knowledge of computer vision and deep learning
- A passion for computer programming, with strong skills in Python or C++
- Intermediate knowledge of Linux and scripting
- Demonstrated ability to learn quickly and problem-solving

Assets

- Experience with advanced image analysis: image processing, segmentation, registration
- Python software packaging, virtual environments, Anaconda/Conda, Jupyter/IPython
- Advanced knowledge of Linux, including scripting and system administration
- Experience with version control systems (Git) and software testing
- MSc level or research experience
- Working knowledge of FSL, FreeSurfer, SPM, MATLAB, R, ITK
- Knowledge of the software development lifecycle

The position is with the Sunnybrook site of the *Heart and Stroke Foundation Canadian Partnership for Stroke Recovery* and the *LC Campbell Cognitive Neurology Research Unit* under Dr. Sandra Black, Director. This dynamic and collegial research environment provides opportunities to participate in pioneering imaging analysis techniques that will be used to understand and treat neurodegenerative and neurovascular disease. Current projects include the Ontario Neurodegenerative Disease Research Initiative (ONDRI), the Toronto Dementia Research Alliance (TDRA) and Medical Imaging Trials Network of Canada-C6 (MITNEC-C6).

Applications are encouraged from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian immigration requirements, this advertisement is directed initially to Canadian citizens and permanent residents. We thank you in advance for your interest. Only those candidates selected for an interview will be contacted. No phone calls please. Application screening will continue until a suitable candidate is identified

Application

To apply for this position, please:

- a) Complete the following online questionnaire: <https://goo.gl/1WvevD>
- b) Send a cover letter and Curriculum Vitae and the names of three potential references to:

Mr. Christopher Scott
Brain Imaging Analysis Lab Manager
L.C. Campbell Cognitive Neurology Research Unit
Sunnybrook Health Sciences Centre
2075 Bayview Avenue, room A421
Toronto, ON, M4N 3M5
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Links

- Sunnybrook Research Institute: www.sunnybrook.ca/research
- University of Toronto: www.utoronto.ca
- Heart and Stroke Foundation Canadian Partnership for Stroke Recovery:
www.canadianstroke.ca
www.sunnybrook.ca/research/?page=csrhome
- LC Campbell Cognitive Neurology Research Unit:
www.sunnybrook.ca/research/?page=cognitiveneurologyhome
imaging.brainlab.ca