

**Position:** AI Data Scientist, Full Time

**Reports to:** Dr. Rayjean J. Hung

**Department:** Lunenfeld-Tanenbaum Research Institute, Sinai Health (<http://www.lunenfeld.ca>), Toronto, Canada

**Hours of work:** 37.5 hours per week



**Position Summary:**

Lunenfeld-Tanenbaum Research Institute is one of Canada's leading biomedical research institutes offering a stimulating research environment, competitive salaries and comprehensive benefits. The Artificial Intelligence (AI) Data Scientist will work under the supervision of the Principal Investigator on a number of large-scale international research projects in the field of machine learning with application to cancer early detection. Specifically, the AI Data Scientist will work with quantitative analysis of medical imaging using deep learning in conjunction with clinical and epidemiological phenotype data. The AI Data Scientist will be involved in all aspects of research study development, funding, initiation, execution, analysis, result interpretation and presentation, and publication of results. The position will initially be for one year full-time with the possibility of renewal.

**Education and Experiences:**

Doctoral degree in Computer Science, Medical Biophysics, Statistics, Epidemiology or related disciplines is preferable. Advanced skills and experiences in machine learning analytics, including deep learning approaches are required.

Salary will be commensurate with qualifications and experience.

**Skills and Qualifications:**

- Advanced knowledge and skills of implementing AI methods on medical images
- Well-developed computing skills with proficiency in statistical software and computer programming, such as R, Python, particularly the analytical framework developed for machine learning such as PyTorch, TensorFlow, etc.
- Research experiences with medical images including but not limited to CT images
- Ability to define optimal statistical methodology and conduct data analysis in large complex datasets
- Proven experience of leading scientific manuscripts and have track records in international peer-review journals.
- Excellent organizational and communication skills to work with national-wide and international collaborators in Europe, Asia and North America.
- Ability to work with an interdisciplinary research team, including epidemiologists, clinician scientists, radiologists, molecular geneticists, and laboratory staff

**Duties and Responsibilities:**

The position will involve various aspects of large-scale research projects focusing on machine learning, including

- Develop automated detection and segmentation tools
- Conduct deep learning analysis for medical images using multi-institutional medical images.
- Build and validate machine learning algorithms and prepare open-source codes
- Managing multifaceted consortium projects and liaise with international and local collaborators for specific research projects
- Lead specific projects with defined research questions
- Assisting funding and ethics applications
- Contribution to the preparation of project reports, and lead specific scientific publications and presentation in the conferences

**How to Apply:**

Please submit CV, cover letter and contact information of three references on-line at Interfolio (<http://apply.interfolio.com/124846>)

Posting open until June 15, 2023. We appreciate all expressed interests in this position, only those candidates shortlisted for interview will be contacted.